DOCUMENT RESUME

ED 034 345 EC 004 701

TITLE	Physical Education and Recreation for Handicapped Children; Proceedings of a Study Conference on Research and Demonstration Needs.
INSTITUTION	American Association for Health, Physical Education and Recreation, Washington, D.C.; National Recreation and Park Association, Washington, D.C.
SPONS AGENCY	Office of Education (DHEW), Washington, D.C. Bureau of Education for the Handicapped.
PUB DATE	[68]
CONTRACT	OEC-0-9-182704-2470(032)
NOTE	91p.
AVAILABLE FROM	AAHPER, 1201 16th St., N.W., Washington, D.C. 20036
EDRS PRICE	EDRS Price MF-$0.50 HC Not Available from EDRS.
DESCRIPTORS	Aurally Handicapped, Camping, Community Recreation Programs, Evaluation Needs, *Exceptional Child Education, *Handicapped Children, Mentally Handicapped, *Physical Education, Physically Handicapped, *Program Evaluation, *Recreational Programs, Recruitment, Services, Visually Handicapped

ABSTRACT

Included are articles on the status of physical education for the retarded, the visually handicapped, the hearing impaired, and the emotionally disturbed. Concepts in research and demonstration needs in physical education and recreation for the physically handicapped are presented. Papers consider the status of recreation for the handicapped as related to the following: community agencies, institutions, and schools. Also discussed are research on recreation camping, an assessment and evaluation of projects, the methods of collecting and disseminating information, legislation, recruitment and training, and available services. (JM)

PROCESS WITH MICROFICHE
AND PUBLISHER'S PRICES.
MICROFICHE REPRODUCTION
ONLY.

ED034345

PHYSICAL EDUCATION AND RECREATION
FOR HANDICAPPED CHILDREN

PROCEEDINGS
OF A
STUDY CONFERENCE ON
RESEARCH AND DEMONSTRATION NEEDS

EC004701E

AMERICAN ASSOCIATION FOR HEALTH, PHYSICAL EDUCATION AND RECREATION

AND

NATIONAL RECREATION AND PARK ASSOCIATION

in cooperation with

Bureau of Education for the Handicapped
U.S. Department of Health, Education and Welfare

ED034345

PROCESS WITH MICROFICHE
AND PUBLISHER'S PRICES.
MICROFICHE REPRODUCTION
ONLY.

PHYSICAL EDUCATION AND RECREATION
FOR HANDICAPPED CHILDREN

PROCEEDINGS
OF A
STUDY CONFERENCE ON
RESEARCH AND DEMONSTRATION NEEDS

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

AMERICAN ASSOCIATION FOR HEALTH, PHYSICAL EDUCATION AND RECREATION

AND

NATIONAL RECREATION AND PARK ASSOCIATION

in cooperation with

Bureau of Education for the Handicapped
U.S. Department of Health, Education and Welfare

The research reported herein was performed pursuant to a contract with the Bureau of Education for the Handicapped, U.S. Office of Education, Department of Health, Education and Welfare. Contractors undertaking such projects under government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official position of the Bureau of Education for the Handicapped.

Contract No. OEC-0-9-182704-2470(032)

STEERING COMMITTEE

AMERICAN ASSOCIATION FOR HEALTH, PHYSICAL EDUCATION, AND RECREATION

*Wanda Burnette, Program Assistant, Programs for the Handicapped and for the Research Conference.

*Donald E. Hawkins, Consultant in Research and Assistant Executive Secretary for Recreation and Outdoor Education.

Roswell Merrick, Assistant Executive Secretary and Consultant for Physical Education and Men's Athletics.

*Julian U. Stein, Consultant in Programs for the Handicapped.

NATIONAL RECREATION AND PARK ASSOCIATION

*Donald Henkel, Acting Director of Research

Ira Hutchison, Jr., Special Assistant for Urban Affairs.

*David C. Park, Consultant, Therapeutic Recreation Services.

William Pond, Executive Officer.

BUREAU OF EDUCATION FOR THE HANDICAPPED

William Hillman, Coordinator, Unit of Physical Education and Recreation Services

James Moss, Director, Division on Research

Max Mueller, Chief, Projects and Programs in Research Branch, Division on Research

UNIVERSITY OF MARYLAND, COLLEGE PARK

Ronald Johnson, Department of Physical Education.

Arnold Shuster, Department of Recreation

AT LARGE MEMBERS

Taylor Dodson
Department of Physical Education
Wake Forest College
Winston Salem, North Carolina

Gideon Jones
Rehabilitative Sciences
Florida State University
Tallahassee, Florida

Lawrence Rarick
Department of Physical Education
University of California
Berkeley, California

John A. Nesbitt
Department of Recreation
San Jose State College
San Jose, California

H. Douglas Sessoms
Recreation Curriculum
University of North Carolina
Chapel Hill, North Carolina

*Editorial Committee.

The American Association for Health, Physical Education, and Recreation is proud to have co-sponsored "A Study Conference on Research and Demonstration Needs in Physical Education and Recreation for Handicapped Children" as a service to all personnel interested and involved in programs for the handicapped in general and in physical education and recreation for the handicapped in particular.

This Conference gave personnel from physical education, recreation, special education and related disciplines a much needed opportunity to investigate the status of physical education and recreation for the handicapped, to identify needs, and to explore strategies to meet specific needs. The interdisciplinary nature of the Conference was unique; the mutual respect among participants was sincere.

Greater understanding of the special contributions of each discipline and the importance of coordinated efforts have been important outcomes of this Conference. The recommendations provide guidelines and direction to practitioners and research personnel to meet the needs of the handicapped more effectively and efficiently. It is to the end of greater opportunity toward a brighter future for all handicapped through the contributions of physical education and recreation that this Conference and its Proceedings are dedicated.

Carl A. Troester, Jr.
Executive Secretary
American Association for Health, Physical Education, and Recreation

On behalf of the National Recreation and Park Association, I express appreciation for the opportunity to participate in this rewarding joint venture. The combined efforts of the American Association for Health, Physical Education and Recreation and the National Recreation and Park Association have resulted in a highly effective Conference.

The co-sponsored "Study Conference on Research and Demonstration Needs in Physical Education and Recreation for Handicapped Children" has contributed an unparalleled degree of understanding within and between the various professional segments involved.

That significant strides have been made toward increased coordination and cooperation among the combined Conference participants is evident; that its subsequent recommendations will continue to improve and inspire the entire profession is a Conference achievement of note.

These proceedings and recommendations will provide direction and motivation in the areas vital to the ultimate beneficiaries – the handicapped.

Dr. Sal J. Prezioso
President
National Recreation and Park Association

Permission to reproduce this copyrighted work has been granted to the Educational Resources Information Center (ERIC) and to the organization operating under contract with the Office of Education to reproduce documents included in the ERIC system by means of microfiche only, but this right is not conferred to any users of the microfiche received from the ERIC Document Reproduction Service. Further reproduction of any part requires permission of the copyright owner.

FOREWORD

The American Association for Health, Physical Education and Recreation (AAHPER) and the National Recreation and Park Association (NRPA) co-sponsored "A Study Conference on Research and Demonstration Needs in Physical Education and Recreation for Handicapped Children" under a contract from the Bureau of Education for Handicapped at the Center of Adult Education, University of Maryland, College Park, February 16-19, 1969. Appropriate substructures of both Associations participated and cooperated in planning and implementing this Conference. Representation included personnel from AAHPER's Physical Education and Recreation Divisions and Unit on Programs for the Handicapped, and NRPA's Research and Program and Services Departments, and National Therapeutic Recreation Society.

The Conference grew from needs expressed by research personnel and practitioners interested and involved in physical education and recreation programs for handicapped children. Both groups increasingly have sought specific information, professional guidance, and direct assistance to help them initiate activities, upgrade programs, answer questions, and attack problems which create roadblocks to progress in various aspects of physical education and recreation programs for handicapped children. Personnel from different disciplines and with diverse backgrounds seek research verification and empirical evidence to support certain programs, activities, methods, procedures, and approaches used in these programs. In addition, developing and applying theoretical frameworks, philosophical bases, sound rationale, and appropriate principles through basic and applied research are sought by personnel in many different situations and environments.

Despite ever-increasing services for personnel working with handicapped children, too little concentrated and coordinated effort has been focused upon ways to expand and enrich opportunities for active participation of handicapped children in physical education and recreation programs. This special Conference was conceived to help meet these needs; it was nurtured by representatives from many disciplines who recognized the importance of active participation in physical education and recreation programs for handicapped children; it was stimulated by a desire for more organized and scientific efforts in meeting more effectively the needs of handicapped children.

This Conference should not be considered an end, for it is only a beginning, a beginning which will lead to improved programs, expanded opportunities, enriched experiences, and new horizons for handicapped children through research, experimentation, and scientific investigation in physical education and recreation. As problems are solved, questions answered and needs fulfilled, new challenges will arise to stimulate research personnel and practitioners interested and involved in all aspects of physical education and recreation programs for handicapped children.

It is to continued growth and development of personnel dedicated to the handicapped, to the handicapped themselves, and to progress that this Conference and its final report are respectfully and thoughtfully dedicated.

TABLE OF CONTENTS

Page

FOREWORD v

TABLE OF CONTENTS vii

INTRODUCTION ix

PURPOSES AND OBJECTIVES xi

PANEL PRESENTATIONS

a. Physical Education
- "The Status of Physical Education for the Retarded" by Louis Bowers 1
- "The Status of Physical Education for Visually Handicapped Children" by Charles Buell 6
- "The Status of Physical Education for the Hearing Impaired" by Peter Wisher 10
- "The Status of Physical Education for the Emotionally Disturbed" by Hally Poindexter 14
- "Precepts and Concepts on Research and Demonstration Needs in Physical Education and Recreation for the Physically Handicapped" by Timothy Nugent 20

b. Recreation
- "The Status of Recreation for the Handicapped as related to Community and Voluntary Agencies" by Morton Thompson 25
- "The Status of Recreation for Handicapped Children in Institutions" by Gerald O'Morrow 29
- "The Status of Recreation for the Handicapped – School Centered" by George Wilson 35
- "Research – Recreation Camping for All Handicapped" by William Freeberg 37

KEYNOTE ADDRESS

- "Time's Passage – Unchanging Times" by Burton Blatt 49

TABLE OF CONTENTS (continued)

Page

RECOMMENDATIONS

ASSESSMENT AND EVALUATION 61
- Contributions, Values and Effects of Participation
- Design and Rationale
- Surveys
- Instrumentation
- Standards
- Methods and Materials
- Physiologically Based Consultations
- Physical and Social Environment

INTERPRETATION 66
- Collecting, Storing and Retrieving Information
- Disseminating Information

LEGISLATION 68
- General Legislation

RECRUITMENT AND TRAINING 69
- Recruitment
- Pre-service Training
- In-service Training

SERVICES 71
- General
- Administration Leadership
- Integrating Handicapped and Non-Handicapped
- Programming
- Education for Leisure
- Services to Parents
- Camping and Outdoor Education

PARTICIPANTS 75

GUEST OBSERVERS 78

INVITED SPEAKERS 80

INTRODUCTION

The primary purpose of this Conference was to pinpoint immediate and future needs for research and demonstration projects in physical education and recreation with handicapped children.

Participation in the Conference was by invitation only and was limited to thirty specialists—eleven physical educators, eleven recreation specialists, and eight from special education and related disciplines. Within each of the three categories approximately half of the participants were research specialists and half practitioners so that results of the Conference could be amalgamated by both theorists and practitioners. Because of widespread interest in the Conference, an additional thirty individuals and representatives of selected organizations and agencies took part as guest-observers.

The Conference opened with formal presentation of important background information on what is known about specific aspects of physical education and recreation for the handicapped. Data for these presentations were based on research and empirical evidence, subjective observations and promising practices. Physical educators approached their task in terms of specific handicapping conditions—mental retardation, visual handicaps, hearing impairments, emotional disturbances and orthopedic handicaps. Recreation specialists made presentations in terms of different environmental settings—community and voluntary agencies, institutions, school-centered programs and camps. Burton Blatt, then Chairman of the Special Education Department, Boston University, presented an overview of needs, gaps, directions, and goals of research and demonstration in physical education and recreation for the handicapped.

Following formal presentations, three discussion groups, consisting of a combination of physical education, recreation and special education professionals, were formed. Their purposes were to explore, discuss and determine research and demonstration needs; establish priorities and provide additional guidance and direction for individuals, agencies and groups interested and involved in these programs. Discussion centered upon four major areas:

Institutions providing physical education, recreation and related services for the handicapped.

Disciplines or knowledge areas involved in providing physical education and/or related programs for the handicapped—physical education, recreation, special education and related areas.

Disabilities and handicapping conditions—mental, physical, emotional and social.

Functions of groups and organizations which provide physical education and/or recreation services to the handicapped—direct services, research and training.

This publication is a complete report of the entire conference including the papers presented and the recommendations from the discussion groups and from other materials, related to the conference.

As a prelude to the meeting the staff of the Unit on Programs for The Handicapped AAHPER, surveyed a variety of personnel involved in physical education and/or recreation programs for the handicapped. A questionnaire requesting statements of problems in need of research was sent to individuals and organizations throughout the United States representing almost all conceivable types of agencies serving the handicapped in all geographical areas. The results of this survey are included with the recommendation from the discussion groups.

Due to the large amount of material derived and duplications that existed, the Editorial Committee reorganized and combined the recommendations into the following categories:

1. Assessment and Evaluation
2. Interpretation
3. Legislation
4. Recruitment and Training
5. Services

Although the Editorial Committee reorganized material and in some instances reworded and reshaped recommendations for purposes of presentation, every effort was made to keep the intent and meaning of recommendations as presented by the discussion groups.

Since all recommendations relate to research and demonstration needs, no attempt was made in the report to determine priorities in different areas or to assess one recommendation as being more important than another. This approach recognizes the diversity of problems and the individuality of priorities according to populations served, types of programs and other similar factors relating to specific situations.

Throughout the Conference, however, there were six general statements that seemed to be emphasized with some degree of consensus:

1. Develop comprehensive retrieval and dissemination procedures and systems to allow researchers and practitioners to utilize fully research findings and model practices.
2. Stimulate relevant demonstration projects employing sound evaluation procedures, specifically:
    a. Direct more research and demonstration efforts toward integrating the handicapped with the non-handicapped.
    b. Employ sound scientific methods involving researcher and the practitioner.
3. Encourage better coordination between various agencies serving the handicapped, including more cooperative efforts between physical education, recreation and special education.
4. Conduct a multi-dimensional analysis of underlying skill functions needed as a requisite for gratifying participation.
5. Place increased research and demonstration emphasis on programs to enable the handicapped to prepare and maintain leisure skills and attitudes.
6. Increase research and demonstration efforts with regard to the contributions of physical education and recreation to the facilitation of learning.

PURPOSES AND OBJECTIVES OF A STUDY CONFERENCE ON RESEARCH AND DEMONSTRATION NEEDS IN PHYSICAL EDUCATION AND RECREATION FOR HANDICAPPED CHILDREN

1. To eliminate or at least minimize a shot-gun approach for using funds appropriated to implement Title V of P.L. 88-164 as amended by 90-170 through a coordinated approach attacking immediately pressing problems.

2. To establish priorities for awarding grants to agencies, organizations, and institutions submitting proposals under Title V of 88-164 as amended by 90-170.

3. To determine what is actually going on around the country and throughout the world in research and in programs of physical education and recreation for handicapped children.

4. To provide a framework for evaluating the quality of research already done, in progress, and to be done in the future in physical education and recreation for the handicapped.

5. To identify qualified researchers and research resources in the university and community settings.

6. To conceptualize basic, applied, and action research problems in physical education and recreation for handicapped children.

7. To examine the role of various agencies and organizations for conducting research and demonstration projects in physical education and recreation for handicapped children (e.g. Federal Government, State Government, national, state, and local agencies and associations).

8. To examine existing systems of disseminating information from research and demonstration projects in physical education and recreation for handicapped children to personnel interested and involved in these programs. A major consideration in implementing this objective will be to consider ways and means of interpreting research information so it can be applied and used by practitioners.

9. To promote commitments to a cooperative, team, and interdisciplinary approach in attacking problems in physical education and recreation for handicapped children through research, demonstration, and related activities.

THE STATUS OF PHYSICAL EDUCATION FOR THE MENTALLY RETARDED

Louis Bowers

A consideration of the current status of physical education for the mentally retarded is perhaps best made with respect to social and educational attitudes about mental retardation which have prevailed in this country until recent years. The mentally retarded largely have been viewed with a focus on their lack of cognitive functioning ability which, in turn, would cause them to be non-achievers in school, non-employable in society, and socially non-acceptable in the community. With this emphasis on intelligence and since intelligence and motor function were thought to be entirely separate, the physical capabilities of the mentally retarded were automatically relegated to a place of small importance. This resulted in the educational development of this aspect of the individual usually being left to chance. The problems of motor performance of the mentally retarded as compared to normal youth were underestimated and the potential for growth in this area was unrecognized.

The first studies of motor ability of the mentally retarded appeared in this country as early as 1919, increased in number prior to World War II, and flourished in the 1950's. However, over fifty percent of all research in this area has been conducted since 1960.

An analysis of the types of investigations concerned with physical attributes of the mentally retarded shows the studies fall into two major catagories–descriptive and experimental. The descriptive studies measure, compare, and/or analyze such performance variables in the mentally retarded as reaction time, balance, agility, finger dexterity, flexibility, and muscle strength, endurance, and power. Sixty-five percent of the studies conducted since 1954 which were reviewed by this author were judged to be of the descriptive type. The remaining thirty-five percent of the studies utilized an experimental design for the purpose of testing the effectiveness of various types of physical activities on either motor performance, physical fitness, self-concept, sociability, or intellectual performance of the mentally retarded. Since 1961, based on those studies reviewed, an equal number of descriptive and experimental type studies have been conducted. During the last four years a recognizable trend toward experimental studies to test the effectiveness of physical education activities for the mentally retarded has been evidenced.

There is little doubt that the mentally retarded, when considered as a group, are less proficient in motor skills and physical fitness performances than normal children. The summaries of research in these areas by Malpass (5) and Stein (9) both support this contention.

Francis and Rarick (4) in 1959 reported the physical performance of mentally retarded boys and girls to be from two to four years behind normal children of the same chronological age. The authors stated that these results indicated the educable retarded child to be even further behind normal children in motor ability than had previously been supposed. The study interestingly pointed out that the patterns of development of the educable retarded followed closely those motor development patterns exhibited by normal children except that the retarded were performing at a lower level for the same chronological age. The performance of the retarded, however, tended to remain relatively fixed with age and, thus, they fell farther behind as they grew older.

The findings of motor deficiencies in retardates were further supported by the results of an investigation of educable and trainable mentally retarded children and youth reported by Cratty (3) in 1966. He also found educable retardates to be significantly higher in their motor performance than trainable retardates. A gross deficiency in balance was evidenced in the children in the study with Downs Sydrome.

A recent report was made by Rarick, Widdop, and Broadhead (7) of the physical fitness status of 4,235 educable retarded children from a representative sample of 241 schools in 21 states. This study utilized a modification of the AAHPER Youth Fitness Test. The findings showed that both boys and girls at all age levels (10-16) were from two to four years behind the performance levels of normal children of the same age.

Studies which describe the physical abilities of the mentally retarded not only provide information about the specific needs of the mentally retarded as compared to other children, but they also point out that within mental retardation there is a great range and variation in the levels of individual abilities. Findings suggest the need for physical education programs to be designed to meet the specific needs and performance levels of the individual rather than a common program for all retarded individuals.

There is clear evidence in studies by Oliver (6), Corder (2), and Solomon and Pangle (8), that the physical performance of the mentally retarded can be improved.

Oliver's study involved educable mentally retarded boys who participated in a course extending over ten weeks. The program consisted of daily systematic and progressive physical conditioning and recreational activities which lasted three hours each day. The group showed significant improvement both in motor proficiency and intelligence test scores.

Corder found significant improvement in physical fitness and measured intelligence after only four weeks of a daily progressive and systematic program of physical education activities. The increases in physical fitness and intelligence scores did not significantly affect the social status of the educable retarded boys in the study.

Solomon and Pangle reported that an eight week program of planned and progressive physical education activities significantly improved the physical fitness status of educable retarded boys. This improvement was demonstrated to be retained after a post-experimental interval of six weeks. The authors felt an important aspect of the study was the degree of the demonstrated physical fitness improvement displayed by the experimental group. At the end of the study on each of the four measures of physical fitness the performance of the educable retarded group was equal to or superior to comparative norms of non-retardates of the same age.

The increases in physical fitness found in the above studies are impressive and might be expected from what is known about the effects of vigorous physical activity on the muscular and cardiorespiratory systems of the human body. A properly planned and conducted program of physical activities which captures and sustains the interest of the retarded will result in improved muscular strength and endurance unless for medical reasons the individual is limited in ability to move.

The degree of improvement in the motor performance of the mentally retarded resulting from physical activity in the studies reported to date is difficult to evaluate due to the overlapping components of physical fitness and motor skill performance. Although the investigators have not included separate measures of motor skill performance apart from physical fitness evaluations, the former seems to be the most difficult to increase.

The improvement in physical fitness in educable retarded boys in both the Oliver and Corder studies has perhaps gone unappreciated due to the more startling aspect of their studies, namely the significant improvement of measured intelligence.

In the few studies reported thus far which have explored the effects of physical activity on the performance of the mentally retarded, it should be noted that all of these involved a relatively small number of subjects, were conducted over a short period of time, and included rather traditional programs of physical education scaled to the level of the participants.

These considerations may tend to produce cautiousness in making claims concerning the contributions of physical education to the mentally retarded. They should, however, at the same time inspire members of the physical education profession to conduct more studies, with more subjects, extended over longer periods of time, which utilize new and innovative individualized programs of physical activities with retarded children.

There was little evidence of planned and organized programs of physical education for the mentally retarded in the literature until recent years. While it cannot be assumed that no programs were in existence in prior years, it is certain that they were relatively few in number and were not known outside of their geographical region. In fact, many fine university and school-centered programs of physical education for retarded individuals have been discovered since the new emphasis in this area. The individuals involved for various reasons had not been able to communicate to others what they were doing.

Formal recognition of the need for physical education for the retarded was not made within the physical education profession until 1965. At the suggestion of Mrs. Eunice Kennedy Shriver, Executive Vice-President of The Joseph P. Kennedy Jr. Foundation, the leadership of the American Association for Health, Physical Education and Recreation appointed a Task Force on Programs for the Mentally Retarded. This was followed by the creation of the Project on Recreation and Fitness for the Mentally Retarded which had as its purpose the stimulation and development of programs of recreation and physical activity for the mentally retarded. The Project was conducted from July 1, 1965, to June 30, 1968, in cooperation with The Foundation which made a grant to AAHPER for this purpose. The Project was broadened in July, 1968, to include all aspects of health, physical education, and recreation for the handicapped.

The Project on Recreation and Fitness for the Mentally Retarded provided for the first time a coordinated effort, a vehicle of communication, and a national emphasis in these areas. The many encouraging gains in this short period of time have been attributed by some to be due to members of the profession trying to make up the neglect of the past half century. There has been a shift from an attitude that engaging in physical activity by the mentally retarded might be dangerous, to one that it might be helpful, to a more recent understanding that it is essential.

The contributions made by the Project on Recreation and Fitness for the Mentally Retarded have taken many forms. One of its first undertakings was to support a nationwide survey of the status of physical education in the public schools by Brace (1). The results from personnel who responded to the survey indicated facilities were inadequate, programs generally were limited in content, and there was a need for more time for instruction and better chronological age grouping. Other findings suggested that all personnel who work with the mentally retarded should have a basic understanding of physical education and that colleges and universities should provide this preparation through special courses.

The activities initiated and sponsored by the Project to provide training of leadership for physical education for the mentally retarded have included a special seminar series for personnel in the Southern states (in cooperation with the Southern Regional Education Board and the Kennedy Foundation) and regional workshops for physical education and special education teachers of the retarded. Numerous state and local workshops and conferences have also been conducted over the last four years. These workshops in many instances brought together for the first time physical educators, special educators, and recreation specialists at state department, university, and public school levels and provided them an opportunity to communicate and cooperate. Nine schools were funded as physical education demonstration centers in various sections of the country.

A National Conference on Programming for the Mentally Retarded was attended by over 400 individuals in October, 1966, in Washington, D.C. Participants included physical educators, recreation specialists, special educators, psychologists and physicians. They represented public schools, residential facilities, day care centers, park and recreation boards, voluntary organizations, and governmental agencies. Proceedings are contained in the publication, *Programming for the Mentally Retarded.*

A few examples of the many publications produced and disseminated by the Project include–

Challenge (a newsletter published five times yearly)
Audiovisual Guide (a listing of a number of films, filmstrips, slide programs, and records)
Recreation and Physical Activity for the Mentally Retarded
Physical Activities for the Mentally Retarded: Ideas for Instruction
Guide for Programs in Recreation and Physical Education for the Mentally Retarded
Special Fitness Test Manual
A Practical Guide for Teaching the Mentally Retarded to Swim

Recent authorization and appropriations for funding research, training, and demonstration projects dealing with physical education and recreation for the handicapped through the Bureau of Education for the Handicapped, U.S. Office of Education, are having and will have important effects in the future.

It is impossible to begin to name all of the various physical education programs and activities for the mentally retarded which have been developed recently throughout the country. Swimming, wrestling, outdoor education, bowling, rhythmical activities, motor developmental activities, challenge courses, circuit training, and jogging all have been reported effective with the retarded.

In many instances programs are being selected for desired outcomes and children fitted to programs regardless of their needs. Another more reasonable approach being utilized is to decide what desired outcomes are indicated by the evaluated needs of the children and selecting and/or developing activities designed to bring about the behavioral changes sought. One of the difficulties inherent in the latter course of action is the present lack of reliable instruments to measure physcial and motor fitness especially for young retarded children. Comparative norms of normal children of the same age on available tests are virtually non-existent especially for younger children.

Most programs have been individualized only to the extent that individual retarded children within a class are allowed to engage individually in the same activity. Individualized instruction in which each child is provided experiences in the areas of greatest needs and at the individual's performance level has yet to be achieved.

The objectives of current programs of physical education for the mentally retarded usually include improving physical fitness, motoric, or social traits; a comprehensive physical education program includes all of these objectives. Some programs have focused on only one of the above objectives, usually physical fitness and motor performance, and hope some improvement in the other areas will occur concomitantly. There are programs which stress physical fitness and seek to improve such performance qualities as muscular strength and endurance, cardiorespiratory efficiency, and flexibility.

Motor performance programs, on the other hand, strive to develop body awareness, spatial relationships, balance, basic locomotive skills, hand-eye coordination and the skills of games and sports. Some individuals have extended the motor outcomes to include the difficult to define term perceptual-motor development. These types of programs view motor activity as a necessary and important part of perceptual and cognitive development, which in turn affects learning skills in reading, writing, math, etc. Movement experiences are viewed by some as being requisites for proper neurological and perceptual development while others see movement experiences as a means of gaining information about one's body in space.

Other programs seek to improve self-concept, self-confidence, and sociability of the mentally retarded through success experiences in physical exercises, motor skills, or organized games.

Program development has been so rapid in the last few years that many current programs are based on very thin research evidence. It is, therefore, necessary not only to increase program action research, but to begin to evaluate and report what is presently being done. The lack of experimental data at a time when there is an upsurge in interest by educators and parents make this area particularly vulnerable for those who would out of over-enthusiasm claim greater outcomes to be derived by the retarded from a particular program than can be supported by evidence. It is primarily the responsibility of the advocators to test the factuality of their program claims; all of us must ultimately critically, but openly, evaluate their effectiveness.

There is a need for action in establishing physical education programs for the retarded, but at the same time there is a tremendous responsibility. The philosophy reflected in demonstrated publicized programs and national projects will set the pattern of programming for many years. Physical education has the opportunity at this time not to repeat mistakes which are evident today in physical education programs for normal students. This can be accomplished by rejecting a philosophy which says that since virtually no programs exist anything done is an improvement and by recognizing the effect these actions might ultimately have on all mentally retarded individuals in the future. The concern at this time should not be how fast programs are developing but in which direction they are developing.

We know what physical education for the mentally retarded has been and how far it has come–how soon it will reach its destined potential will really be determined by the research and teaching actions of the future.

References

1. Brace, D. K. "Physical Education and Recreation for the Mentally Retarded Pupils in Public Schools." *Research Quarterly* 39: 779-782; 1968.
2. Corder, W. O. "Effects of Physical Education of the Intellectual, Physical Social Development of Educable Mentally Retarded Boys." *Exceptional Children* 32: 357-364; 1966.
3. Cratty, B. J. "The Perceptual Motor Attributes of Mentally Retarded Children and Youth." Monograph, Mental Retardation Services Board of Los Angeles County, California, August, 1966.
4. Francis, R.J., and Rarick, G. L. "Motor Characteristics of the Mentally Retarded." *American Journal of Mental Deficiency* 63: 792-811; 1959.
5. Malpass, L. F. "Motor Skills in Mental Deficiency." *Handbook of Mental Deficiency.* (Edited by N.R. Ellis.) New York: McGraw-Hill, 1963.
6. Oliver, J. N. "The Effects of Physical Conditioning Exercises and Activities on the Mental Characteristics of Educationally Sub-Normal Boys." *British Journal of Educational Psychology* 28: 155-156; 1958.
7. Rarick, L.J., Widdop, and G. Broadhead, "The Motor Performance and Physical Fitness of Educable Mentally Retarded Children." Madison: University of Wisonsin, 1967.
8. Solomon, A., and Pangle, R. "Demonstrating Physical Fitness Improvement in the EMR." *Exceptional Children* 33: 177-181; 1967.
9. Stein, J. U. "Motor Function and Physical Fitness of the Mentally Retarded." *Rehabilitation Literature* 24: 230-242; 1963.

THE STATUS OF PHYSICAL EDUCATION FOR VISUALLY HANDICAPPED CHILDREN

Charles Buell

In the United States, there are two basic approaches to educating visually handicapped children in residential facilities and public schools. Since 1832, residential schools have conducted educational programs for blind and partially seeing pupils; today about 8,000 boys and girls are enrolled in these schools. Formal classes for blind pupils virtually no programs exist anything done is an improvement and by recognizing the effect these actions might ultimately have on all mentally retarded individuals in the future. The concern at this time should not be how fast programs are developing but in which direction they are developing.

We know what physical education for the mentally retarded has been and how far it has come–how soon it will reach its destined potential will really be determined by the research and teaching actions of the future.

References

1. Brace, D. K. "Physical Education and Recreation for the Mentally Retarded Pupils in Public Schools." *Research Quarterly* 39: 779-782; 1968.
2. Corder, W. O. "Effects of Physical Education of the Intellectual, Physical Social Development of Educable Mentally Retarded Boys." *Exceptional Children* 32: 357-364; 1966.
3. Cratty, B. J. "The Perceptual Motor Attributes of Mentally Retarded Children and Youth." Monograph, Mental Retardation Services Board of Los Angeles County, California, August, 1966.
4. Francis, R.J., and Rarick, G. L. "Motor Characteristics of the Mentally Retarded." *American Journal of Mental Deficiency* 63: 792-811; 1959.
5. Malpass, L. F. "Motor Skills in Mental Deficiency." *Handbook of Mental Deficiency.* (Edited by N.R. Ellis.) New York: McGraw-Hill, 1963.
6. Oliver, J. N. "The Effects of Physical Conditioning Exercises and Activities on the Mental Characteristics of Educationally Sub-Normal Boys." *British Journal of Educational Psychology* 28: 155-156; 1958.
7. Rarick, L.J., Widdop, and G. Broadhead, "The Motor Performance and Physical Fitness of Educable Mentally Retarded Children." Madison: University of Wisonsin, 1967.
8. Solomon, A., and Pangle, R. "Demonstrating Physical Fitness Improvement in the EMR." *Exceptional Children* 33: 177-181; 1967.
9. Stein, J. U. "Motor Function and Physical Fitness of the Mentally Retarded." *Rehabilitation Literature* 24: 230-242; 1963.

THE STATUS OF PHYSICAL EDUCATION FOR VISUALLY HANDICAPPED CHILDREN

Charles Buell

In the United States, there are two basic approaches to educating visually handicapped children in residential facilities and public schools. Since 1832, residential schools have conducted educational programs for blind and partially seeing pupils; today about 8,000 boys and girls are enrolled in these schools. Formal classes for blind pupils were introduced into the public schools of our country about 65 years ago; not until 20 years ago did this approach become widely accepted. Today approximately 12,000 blind and partially seeing pupils are enrolled in special programs in public schools. Sweeping changes have taken place in educational programs for visually handicapped children in a comparatively short period.

In times of rapid change, problems often appear. One problem which remains unsolved in many public schools is that programs of vigorous physical education have not been organized for visually handicapped pupils. The writer estimated that 6,000 to 8,000 children in public school classes for the blind and partially seeing are not offered realistic programs of physical education. For over 130 years vigorous physical education has been a part of curricula in residential schools for the blind. More recently some teachers and administrators in public schools have included visually impaired children in regular physical activities. Thus, hundreds of thousands of blind children, over an extended period of time, have exercised as vigorously and safely as their seeing peers. For example, each year approximately 500 visually impaired boys compete successfully against sighted opponents in interscholastic and intercollegiate wrestling. Each year about 25 blind and partially sighted athletes win places and medals in various State High School Wrestling Tournaments. The need, feasibility, and safety of vigorous physical activity for blind children have been established beyond doubt for many decades. Hopefully, all public schools soon will approach physical education for visually handicapped boys and girls in a realistic manner.

Some current and rather widespread practices with the visually handicapped are indefensible–excusing them from physical education; giving them unearned marks in physical education for playing table games; keeping score for their sighted classmates; and, for taking part in similar inactive pastimes. In one school, blind pupils received marks in physical education for standing outside the gym door day after day!

Physical fitness is important to all of us; it is particularly important to blind individuals who must work harder to achieve the same rung of success as their seeing peers. Thus, visually impaired children should be offered as much, if not more, vigorous physical activity as deemed necessary for children with normal vision.

Why is physical education not offered to thousands of visually impaired children in public schools? False beliefs held by many public school teachers and administrators relate to the problem–

- Blind children have more accidents and injuries than those with normal vision.
- Blind children are unable to participate effectively in the activities of regular or adapted physical education programs.
- Blind children require more supervision from physical education teachers than those with normal vision.

These fears have not been proven! In fact, approximately 4,000 visually impaired children are successfully participating in public school physical education programs. Blind pupils at Buena Vista School, Walnut Creek, California; Pleasant Hill High School, Pleasant Hill, California; Washington Irving Junior High School, Los Angeles, California; Washington School, Fargo, North Dakota; Lee School, Lindbergh Junior High School and Wilson High School, Long Beach, California, are representative of those who participate regularly and energetically to achieve physical fitness, motor skill, and physical proficiency, all of which mean so much to them. Genevie Dexter, Consultant in Physical

Education, California State Department of Education, says, "From observation, informal reports, and the lack of statistical data, there is no evidence in California that blind children have any more accidents than their seeing peers."

There are many activities which need no modification for visually handicapped—swimming, dancing, rebound tumbling, trampolining, gymnastics, wrestling, weight lifting, some track and field events, most combative sports, and many relays. Some schools place blind students in units of instruction involving activities that need little or no modification. Other public schools place visually impaired pupils in adapted physical education classes, where they are expected to exercise energetically. Still other schools assign visually handicapped children to regular physical education classes. When blind children are included in sport activities like baseball, basketball and football, modifications are made only for them so as not to interfere with the enjoyment of the game for other players.

A blind child in a physical education class need not mean more supervision for the teacher. Many schools, including Indian Hills Junior High School, Shawnee Mission, Kansas, have solved the problem by pairing a blind child with a classmate who has normal vision. Sighted children learn quickly to give only assistance which is required by their visually impaired classmates.

Not only is physical education feasible for blind children in public schools, but additional funds are sometimes available for this purpose. In California, for example, funds are available to school districts for organizing physical education programs for handicapped children, including those with visual impairments.

Aids to teachers. There is only one full length book on physical education for blind children (1). Chapters on physical education for visually impaired are included in books on adapted physical education by Fait (2) and Davies and Daniels (3). A periodic bulletin (4) which focuses on news from residential facilities for the blind is distributed by the Association for the Education of the Visually Handicapped; it also contains information helpful to public school personnel. Teachers with multiply-handicapped blind children in their classes will find an article by Brothers (5) informative and helpful. A 16 mm, 20-minute, sound, color film (6) is available for purchase or rental. Blind children of all ages are shown participating in a variety of vigorous physical activities in both residential and public schools.

A number of universities and colleges offer courses in adapted physical education. Some of these courses include discussions of physical education for visually handicapped children.

A limited number of workshops for physical educators of the blind have been held. Physical education workshops are held in conjunction with each biennial convention of the Association for the Education of the Visually Handicapped. In 1964 Michigan State University and the Michigan School for the Blind sponsored a two-week workshop for 60 physical educators of the blind (7). Two years ago the Kansas State Department of Education conducted a three-day workshop at a public junior high school. A highlight of this workshop was a two-hour demonstration in which blind boys and girls participated with their seeing classmates in a variety of physical education activities. Each year Dance, Inc. (8) conducts a five-day dance clinic for persons who work with blind and other handicapped children.

The number of research studies related to physical education for the visually impaired is limited. A well-known study is Buell's (9) investigation of the motor performance of visually handicapped children. From this study, achievement scales were constructed and have been used in many schools. In 1962 the American Association of Instructors of the Blind (now the Association for the Education of the Visually Handicapped) sponsored a study of physical fitness of 1,400 blind children (10). Surveys of facilities and activities in residential schools for the blind were conducted by Williams (11) and Wadell (12). Swimming for blind children was surveyed by Grutzmacher (13) and Seamons (14).

Aids to blind and partially seeing children. *Physical Education for High School Students; The Boys' Book of Physical Fitness;* and, *The Girls' Book of Physical Fitness* (15) are available in Braille and large type. A sports column appears in Braille and large type editions of *Teen-Time* (16).

Special Equipment. Four years ago a yellow soccer ball with bells in it was made available in the United States (17). This ball withstands reasonable batting and kicking, can be heard while bouncing or rolling, and has improved many games for blind players. An electronic "beeper" ball with a rechargeable battery may be purchased in England (18). This ball will not withstand kicking but can be used to advantage in such games as Snatch the Bacon and Spud. There is an audible goal locator (15) manufactured for the blind. Recently a battery was added so the device can be taken anywhere on or off the campus to indicate direction to blind children. A portable bowling rail (17) gives blind bowlers a better sense of direction. Although most blind bowlers find the rail very helpful, many including sightless Jenny Reeves who bowled a three-game series of 454, prefer to perform without it. The Sports Field Kit (15) is helpful for illustrating playing areas, positions of players, types of plays, and strategies in football, baseball, basketball, bowling and volleyball.

The Outlook. Due to the 1964 epidemic of rubella, educators in residential schools for the blind, and to some extent those in public schools, will find a marked increase in the number of multiply-handicapped blind children. This will affect physical education of the visually impaired in that more adapted programs will be required. Employment, useful work, and marriage motivate handicapped, as well as, normal children. Tens of thousands of visually handicapped adults are gainfully employed today. The fact that even more remain unemployed is not due to their inability to work but in a large measure from the attitudes toward blindness held by a high percentage of the general public.

Indications are that more and more public schools are meeting their obligations to provide full educational opportunities for visually handicapped boys and girls. Comprehensive programs which include vigorous physical activities will help these children lead lives blessed with more health, success, usefulness and happiness in adulthood.

References

1. Buell, Charles. *Physical Education for Blind Children.* Springfield, Ill.: Charles C. Thomas, 1966.
2. F.E. Fait. *Special Physical Education.* Philadelphia: W. B. Saunders, 1966.

3. Daniels, A. S., and Davies, E. A. *Adapted Physical Education*. New York: Harper and Row, 1965.
4. Association for the Education of the Visually Handicapped, 1604 Spruce St., Philadelphia, Pa. 19103.
5. Brothers, Roy. "Stimulating Learning Through Physical Activity." *Proceedings of the Association for the Education of the Visually Handicapped, 1968*. Philadelphia: Association for the Education of the Visually Handicapped (1604 Spruce St.).
6. Charles Buell, 4244 Heather Road, Long Beach, California 90808.
7. Bureau of Publications, Department of Education, Michigan State University, East Lansing, Michigan 48823.
8. Dance, Inc., 155 Franklin St., Dayton, Ohio 45402.
9. Buell, Charles. "Motor Performance of Visually Handicapped Children." Exceptional Children 17; 69–72; December 1950. (Reprint available from author.)
10. American Association of the Instructors of the Blind (now Association for the Education of the Visually Handicapped). *Proceedings of the American Association of the Instructors of the Blind, 1962*. Philadelphia: Association for the Education of the Visually Handicapped (1604 Spruce St.).
11. Williams, F. Niel, "Physical Education Adapts to the Visually Handicapped." *Journal of Health Physical Education Recreation* 33: 25–26; March 1964.
12. Carol Wadell. Perkins School for the Blind, Watertown, Massachusetts 02172.
13. Jean Grutzmacher, Physical Education Department, Ohio State University, Columbus, Ohio 43214.
14. Seamons, Gloria. "Swimming for the Blind." Provo, Utah: Brigham Young University, 1966.
15. American Printing House for the Blind, 1839 Frankfort Avenue, Louisville, Kentucky 40206.
16. *Teen-Time*. St. Louis, Missouri: Concordia Publishing House (3558 South Jefferson Avenue). Free subscriptions available to visually impaired children.
17. American Foundation for the Blind, 15 West 16th St., New York, N.Y. 10011.
18. Royal National Institute for the Blind, 224 Great Portland St., London, W. 1, England. The price of the "beeper" ball is $17.50.

STATUS OF PHYSICAL EDUCATION FOR THE HEARING IMPAIRED

Peter R. Wisher

Introduction

It is difficult, in the time allotted, to present a comprehensive report on the status of physical education for the deaf. It should be mentioned that many of the observations expressed here are based upon my personal experiences with the deaf, in a variety of capacities, over a period of fourteen years. Other sources of information were informal studies by physical education majors and teachers at Gallaudet College. Research of a formal nature in this special area is practically non-existent.

Definitions

The term "physical education" is used in a broad sense to include not only physical education, but health and athletics as well.

The terms "the deaf" and "the hearing" are used constantly, as though a dichotomy existed. The range of deafness, or hearing, extends from those individuals who are profoundly deaf through those who possess normal hearing. The deaf or hearing impaired are those persons "... in whom the sense of hearing is non-functional for ordinary purposes in life" (1). Mention should be made of the hard-of-hearing," . . .those in whom the sense of hearing, although defective, is functional with or without a hearing aid" (1).

Since there appears to be some difficulty in classifying persons with impaired hearing, it follows that estimates of the total deaf population in this country vary with each investigator. Reported estimates range from 120,000 to 15,000,000. The true total is probably between these two extremes. One recent study estimated the deaf population in the United States to be "approximately 8 million" (2).

The following discussions of the deaf and their education, characteristics of the deaf and the status of physical education are presented to provide insight into the current subject.

Education

The deaf are educated in private and state residential schools or in private and public day schools or classes. Students with the ability to pursue higher learning attend regular "hearing" colleges, Gallaudet College, the only liberal arts college exclusively devoted to the education of the deaf, or Rochester Technical Institute, where a technical education is now available to qualified deaf.

The manner of communication in the education of the deaf is the most important single consideration and the most controversial. Persons uninvolved in the education of the deaf find it difficult to understand the gap between the oralists and the manualist. The former group believes that all communications with and between the deaf should be oral, using only speech, speech-reading, and, of course any auditory equipment that could be helpful. The manualists believe that the interests of the deaf are best served by using manual communication, i.e., fingerspelling and/or the language of signs.

The simultaneous method is used at Gallaudet College. In this system, speech, manual alphabet and the language of signs are used simultaneously. My experience leads me to believe that many of the problems associated with the deaf and their children can be traced to communication difficulties. All deaf children should learn speech to the extent they can. They should also learn manual communication as a second language. In my fourteen years at Gallaudet, I have never had students with whom I could communicate exclusively with the oral method.

Characteristics

The deaf have been misunderstood in the past, and prejudicies and unfounded opinions are still prevalent throughout the world. For example, the terms "deaf and dumb" and "deaf-mute" are not only repugnant, they are inaccurate. Most deaf persons have some speech. In my experience with the deaf, I have discovered that there are more "hearing and dumb" than there are "deaf and dumb".

Contemporary educational practices tend to perpetuate misconceptions and consequently retard progress. Since many of the characteristics of the deaf discussed here may be the result of imperfect communication methods, the validity of these findings may be blurred:

1. Normal acquisition of language is not possible for the deaf. The degree of hearing loss and age of onset are influencing factors. (4, 6, 9)
2. Deaf children tend to be better adjusted if their parents are deaf. (4, p. 184)
3. Language difficulties lead to social difficulties. These problems are reflected in relations with parents, peers, and society in general. (6)
4. Extremes in behavior are noted; these range from complete withdrawal to violent outbursts of rage. (3, 4, 5, 6)
5. Regarding educational advances, the deaf appear to be from four to seven years behind their hearing peers. (7, p. 213)
6. Most hearing impaired adults use either the language of signs or the simultaneous method of signs, manual alphabet and speech. (4, p. 119)
7. On the basis of three studies (4, 5, 6) the following traits are reported: social immaturity, impulsive behavior, egocentricity, rigid standards of behavior and etiquette, and certain deficiencies with respect to abstracting and conceptual ability.
8. Children, regardless of the means of communication used in a particular school, tend to communicate manually when not supervised. (6, p. 13)
9. One researcher (9) found that the deaf are concerned more with the attitudes of their peers than with those of authorities.

Status of Physical Education for the Deaf

Physical education has played an important role in the education of the hearing in this country; this fact does not seem to hold true for the deaf. As early as 1882, Swiler (8) at the Convention of Instructors of the Deaf, pointed out the need for an adequate physical education program. In 1895, Brown (8) at the Fourteenth Convention, outlined the urgency of initiating health and hygiene classes for the deaf. At present, many residential schools for the deaf have neither physical education programs nor health classes. There is an emphasis on a few varsity sports, especially basketball.

Approximately 98% of the students in residential schools terminate their education at this level, and consequently their education for life is incomplete. Physical education provides the deaf with an environment for learning that is unsurpassed. Many deaf get little satisfaction from television, radio, concerts, movies, and play–they tend to involve themselves in activities that are visually oriented, such as sports, outdoor activities, social gatherings and others.

Incidentally, in my opinion the observations that the deaf dance to vibrations and that they have poor balance are folklore. It is true that the deaf feel vibrations, but they do not dance to them. As for poor balance, if the balance mechanism in the ear is affected, balance will also be affected. However, on the college level, I have observed negligible balance problems in those enrolled in regular physical education classes. There are, of course the multiple-handicapped in whom balance may be a factor.

Some recent informal studies by physical education majors and teachers at Gallaudet College revealed the following:

1. All schools support at least one varsity sport, basketball.
2. In one study, 70% of the schools supporting a physical education program used only part-time teachers.
3. A survey of freshman boys taking health at Gallaudet College revealed that 55% had never had a health class prior to college.
4. Incoming students are given the national fitness test. Averages in all test items were below national norms for the hearing. After one year of physical education, on a re-test, the deaf surpassed the national norms.
5. In schools where physical education programs were in effect, some question regarding the curriculum emerged. In one of my classes consisting of 8 students, none had ever had tennis instructions; one girl informed me that in her physical education classes, the girls only played basketball all year.

The program of physical education on the college level is very encouraging. For example, no financial help is given to varsity athletes; 30% of the student body participate in inter-collegiate athletics, and another 40% take part in intramurals; all students take two years of required physical education and one year of health. Gallaudet is a member of the NCAA, Mason-Dixon Conference, and the Maryland Intercollegiate Conference; the boys take part in ten varsity sports and the girls in six. Additionally, the "Deaf Olympics" are held every four years and a national deaf basketball championship is held yearly.

Conclusion

In view of the foregoing, I offer the following recommendations for your consideration as possible areas for research:

1. A survey of existing philosophy and practices in residential and day schools for the deaf should be undertaken to reveal any gaps between the ideal and the real.
2. Sustained dissemination of information is needed by agencies to draw administrators' attention to problems in this area.
3. There is need for the development of demonstration centers and tools for assessing students, programs and teachers.
4. The advisability of qualified deaf individuals becoming involved in the planning, implementation and operation should be studied.
5. Current learning and teaching practices should be tested, especially the most central issue in the education of the deaf—communication.
6. An assessment of all types of visual media should be made. Innovative devices should also be tested for effectiveness and the practicality of self-teaching machines needs exploration.

Statement

"No child can be considered educated unless he has acquired in childhood and youth familiarity and skill in a large number of games and sports which give satisfaction and lead to their pursuit in recreational ways out of school" (10, p. 354).

References

1. Convention of American Instructors of the Deaf. *American Annals of the Deaf* 82: 1: 3; January 1938. Washington, D.C.: Convention of American Instructors of the Deaf (5034 Wisconsin Avenue, N.W.).
2. U.S. Department of Health, Education, and Welfare, Public Health Service. *Characteristics of Persons with Impaired Hearing.* Washington, D.C.: Government Printing Office, 1967.
3. Altshuler, L. "Psychological Contributions in the School Age Deaf." *American Annals of the Deaf* 107: 553-559; 1962.
4. New York State Psychiatric Institute. "Family and Mental Health Problems in a Deaf Population." *Medic Genetics.* New York: New York State Psychiatric Institute, 1963.
5. Myklebust, H. *The Psychology of Deafness.* New York: Grune-Stratton, 1960.
6. Kohl, H.R. "Language and Education of the Deaf." New York: Center for Urban Education, 1956.
7. Galludet College. *Report of the Proceedings of the International Congress on the Education of the Deaf and of the 41st Meeting of the Convention of American Instructors of the Deaf.* Washington, D.C.: U.S. Government Printing Office, 1964.
8. Fauth, Warren W., and Fauth, Bette L. "A Study of the Proceedings of the Convention of American Instructors of the Deaf, 1850-1949." *American Annals of the Deaf* 95: 1950.
9. Nass, M. L. "Development of Conscience: A Comparison of the Moral Judgments of Deaf and Hearing Children." *Child Development* 35: 1073-1080; 1964.
10. Williams, J. F. *The Principles of Physical Education.* Philadelphia: W.B. Saunders Co., 1964.

STATUS OF PHYSICAL EDUCATION FOR THE EMOTIONALLY DISTURBED

Hally B. W. Poindexter

Conservative estimates indicate emotionally disturbed children account for five percent of the elementary school population. In a large group study in California, Bower (2) found ten percent of school children disturbed to the extent of needing psychiatric help. He identified only 0.5 percent so severely handicapped emotionally that they needed intensive treatment or special placement. Unlike more easily discernible and more obvious handicapping conditions, defining and identifying disturbed children are basic problems to be dealt with prior to determining movement deficiencies and developing physical education programs.

Emotional disturbance is an encompassing term including such diagnoses as hyperactive-neurologically impaired, phobias, psychoses, and behavior disorders. The causes for such disorders are attributed to many things–among them are malnutrition, chemical imbalance, neurological impairment of genetic origin, injury, illness, or psychologically determined factors. The etiology of disturbance is beyond the realm of this paper, but it does seem important to point out the subjectivity of evidence due to the fact that a definition involves culturally determined value judgments. For some years deviation, or lack of deviation, was established on the basis of ordinariness of behavior as contrasted to unusualness of behavior. Mental illness in children is a twentieth century phenomenon. As Despert (4) points out: "One must reach the twentieth century to see the dawn of an awareness of the child's inner life, his emotional needs, and his environmental problems. Leo Kanner has rightly pointed out that child psychiatry could not have existed before the twentieth century."

Observations and clinical studies identify the emotionally disturbed child as one who is unhappy and insecure within himself, who has poor relationships with other people and with his environment, who has excessive hostility, fears or fantasy life, and who may evidence too many nonorganic physical complaints or too little control over his bodily functions without organic cause. Psychiatric diagnosis may include such symptoms as: (a) extreme difficulties in the learning process; (b) gross inability to socialize with other children or adults; (c) very poor self concepts; (d) evidence of neurosis or phobias; and, (3) inability to work toward or reach their intellectual potential. The classroom teacher and the physical education specialist identify the child as one who fails to benefit from the educational situation and one who proves unresponsive or disruptive and destructive in the setting.

Nearly all disturbed children reflect learning disabilities and some exhibit clumsy and awkward movement patterns. If causative factors, such as neurological injury or chemical imbalance, affect the central neural mechanism, the physical educator may expect atypical motor skill responses. Motor skills are learned sequences of responses–learned and stored by means of a central neural mechanism called motor skill memory. Since both basic motor skills and specific motor skills depend on neural and muscular structure, the capacities of these structures must be considered as limiting factors. That is, one cannot expect human motor skills to have characteristics that exceed the capacity of the response mechanism itself.

Recognizing the complexities of defining disturbance, how then do we describe the motor characteristics of the emotionally disturbed child? Over three years ago we began an investigation which we believed would lead to a descriptive "profile" of motor characteristics and performance on a sample of youngsters bearing psychiatric diagnosis of "disturbed." This sample would be viewed, in comparative terms, with a sample of "normal" children. (The use of the term normal refers to behavior, is not intended as the necessary equivalent to average and mediocre, and represents lack of conflict, anxiety, undue stress and the like.) Interest in the present study began with a pilot project involving nine emotionally disturbed children who were members of the Day School of the Texas Institute of Child Psychiatry. The disturbed group, eight boys and one girl, ranged in age from seven to twelve with an IQ range (Wechsler) of 90-110. All children indicated perceptual learning difficulties as measured by the *Marianne Frostig Developmental Test of Visual Perception.* With one exception, indicating minimal damage, all children tested within the range of normalcy for their ages as recorded on EEG.

A normal group of four girls and five boys, on the same age range and free of physical impairments, was identified. Their IQ's ranged in the average and above average categories; they were ranked by their teachers and principals as possessing good self concepts, sound social relations and emotional stability. All were achieving at an expected level. Each child was tested on:

> *Witkin's Rod and Frame Test* to determine the true vertical in a distorted field and to distinguish field dependence and field independence. This is considered an objective measurement of a perceived body image or self concept under the influence of a dominant field. (7)
>
> *Rotary Pursuit Test* to measure hand-eye coordination.
>
> *Kephart Perceptual Motor Survey Test* to reveal perceptual motor ability and activity. (5)

Avoiding statistical findings, test results supported the hypotheses that: (a) Emotionally disturbed children with perceptual learning problems would be identified by the Kephart Perceptual Motor Survey and that there would be a significant difference between the mean scores of disturbed and normal children; (b) Emotionally disturbed children would score lower than the normal group on a measure of hand-eye coordination; and, (c) Emotionally disturbed children would have larger error than normal children on the Rod and Frame Test.

A motor training program was undertaken to test the hypotheses that (a) a motor base training program for emotionally disturbed children would aid in perceptual ability and (b) a perceptual motor training program would alleviate the dramatic emotional outbursts evidenced by disturbed children in stressful situations. Very early in the training program it became evident that it would not be possible to evaluate scientifically the degree to which the motor program would aid in the improvement of perceptual learning ability. Many variables entered into the program which made isolating the causes for improved learning difficult. It was also recognized that too little was really known about the physiological and psychological state of the children at the onset of the training program. Subjectively, both from the experimenters' observations and those of teachers and psychiatrists at the Day Hospital, learning seemed to take place in both a motoric and cognitive sense.

Challenged by the increasing complexity of causation, yet encouraged by observable progress, a more comprehensive study was undertaken. Test batteries were developed to determine the behavioral background, perceptual motor abilities and physiological status of larger samples of both disturbed and normal children. A comprehensive statistical report is planned but the following comments must be considered tentative and primarily empirical.

The emotionally handicapped child, like other children, came from various socioeconomic backgrounds, exhibited a range of intelligence similar to normal children and generally lived with his parents in families of varying sizes. In the age range 7-10, more boys evidenced disturbance than girls. They differed from other children in their emotional handicap and educational retardation. (In some cases the severity of the disturbance led to an incorrect diagnosis of mental retardation.) Emotionally disturbed children, as a group, evidenced more measurable neurological impairment than the "normal" group although approximately ten percent of the latter group indicated brain dysfunction as measured by EEG. There is some cursory evidence that the disturbed child showed more developmental deviations in training routines, childhood illnesses and general behavior patterns.

Disturbed children, contrary to expectation, were not significantly hyperactive in gross motor responses in the activity room. This observation was made by exposing a child for a five minute period to a room of appealing toys. The child's unhindered behavior parterns in handling toys, general activity and intensity of activity were measured by electronic computations.

The disturbed child, with no serious limitations of neurological impairment, reflected similar reaction and movement time responses when given a visual stimulus. The digital timer began with the presentation of a light stimulus and stopped with release of the reaction key. The speed of movement time was then activated and was deactivated as the terminating button was contacted. From present observations, findings support the point of view that reaction time and movement time seem to be more related to a slow response function of mentally deficient rather than the emotionally disturbed (6).

Emotionally disturbed youngsters seemed to score less well than their normal age mates on measures of strength, power, agility, coordination, balance and speed. Strength was evaluated by (a) grip strength, three trials with each hand using a hand dynamometer; (b) knee extension; and, (c) shoulder arm strength as recorded by use of the Elgin Table. Power measures included the distance on three trials of the standing broad jump; abdominal strength was evaluated by performance on the Kraus Weber and bent knee sit ups. Speed was assessed by time on a 30-yard dash and agility by a shuttle run task and performance on a walking beam. In addition to time and distance measures, some performances were recorded on film, movement patterns later analyzed and evaluated. Coordinated locomotor patterns of hopping and skipping and trampoline performances indicated further differences between the groups. Balance, both static and dynamic, was deficient in the disturbed group.

Further monitoring of the child's respiration, heart rate, and blood pressure was accomplished under conditions of rest, stress, exercise, and recovery. An interesting response was seen in many of the emotionally disturbed subjects and recorded by the Galvanic Skin Response Preamplifier under conditions of "academic" stress. When asked to accomplish a mirror tracing pattern in a limited period of time, normal children most frequently responded by anxiety and a corresponding resistance change. Many disturbed children, quite contrary to expectation, showed little resistance change. They did, however, respond to physical stress and physical threats much as the normal group. It seems reasonable to conjecture that the emotionally disturbed child is unaccustomed to "success" and anxiety created by stress makes failure more likely. If the child cannot muster an adequate response to a situation, he may create an anxiety state that blocks clear thinking. Such confusion precludes deliberation and destroys the ability to formulate an appropriate course of action. Excessive motivation or anxiety seem to narrow perception and, therefore, limit the response. Thus, the child "turns off" his response. In a similar manner it seems likely that he can "turn off" the teacher and the parent.

The Kephart Perceptual Motor Survey was administered to each child. The five major sections of the survey are concerned with: (a) balance and posture flexibility; (b) body image and differentiation; (c) perceptual motor match; (d) ocular control; and, (e) form perception. Performances of the groups were quite similar to those of the pilot groups.

A battery of psychological tests relating to self-concept, body image, and level of aspiration are presenting problems of interpretation and evaluation. There are some indications that they will prove quite meaningless in relating to other measurable factors, yet may reinforce Ayres (1) findings of deficits in body image, hyperactivity-destructibility and figure ground discrimination (inability to select superimposed figures out of confused backgrounds) among 150 neurologically handicapped individuals.

For a meaningful interpretation for use by physical educators, it is well to turn to the realm of learning theory to identify factors which seem to influence the acquisition, maintenance and utilization of psychomotor abilities. Attention is called to a limited number of principles that seem to have immediate importance in program development for disturbed children.

- *Practice.* No condition is of greater importance to the acquisition of motor skills than practice; that is, repetition of the desired response-sequence with reinforcement.
- *Knowledge of results.* In practicing a motor skill, reinforcement usually takes the form of "feedback" to the learner concerning the degree of correctness (or error) of his responses. Where effect cannot be observed, *or where effects cannot be understood,* little, if any, learning takes place.
- *Discovering the relevant stimuli.* Most motor skills are to some degree externally controlled. "Guiding" the learning of a skill can often be aided by techniques which reduce the time of discovery of correct stimuli.
- *Schedule of practice in motor skill performance.* The important factors that influence the performance measured during the learning of a motor skill are the time of continuous practice and the interval between trials of practice; that is, massed practice with little or no rest and distributed practice with frequent pauses. The considerations for children with periods of inattentive hyperactivity or diverting fantasies are obvious.

Perhaps it is appropriate to summarize by indicating some very definite pronouncements concerning the setting for physical education programs for disturbed children. Unlike some diagnosed handicaps, emotional disabilities are not necessarily permanent and are more modifiable than many other conditions. The earlier the identification of the child and modifications made in his educational and environmental setting, the more opportunity for improvement.

Special classes in psychomotor development should be provided. Because the disturbed child does reflect a motor performance deficit, he should be protected from more advanced performers for his safety as well as his behavior. Cratty (3) noted that a group of educationally handicapped children exhibited motor competencies typical of well functioning children two to four years younger; most disturbed children do not reflect the most severe performance deficits. Disturbed children must experience success and a motor program in which they are made aware of their relative inability tends to create stress and disruptive behavior.

Flexibility is required in program planning for the disturbed child is not in a static condition. His hourly experiences and changing environment result in changes in behavior and personality.

Two things seem certain. Emotionally disturbed children need a structured setting and teacher support. A structured approach involves rules and routines to facilitate action—not prevent it. Learning seems to take place best under conditions of moderate motivation in "uncharged settings" focusing on the immediate. A period of hyperactivity is not the time to ask for creative movements, but the time to channel movements. At these times children seem to strive to bring order out of chaotic action and often turn to the teacher for stability and a statement concerning parameters of behavior. He *wants* and *expects* the teacher to prescribe and direct the task.

Contrary to general opinion, the "steam valve" theory in which vigorous gross motor activities are encouraged as a release of tensions, aggression and hostility, and often used with normal children, seems to have little applicability for such activities with disturbed children. Although many research studies report that vigorous activity reduces the biochemical indices of stress in the blood, and consequently should set a better environment for classroom learning, vigorous activity often heightens general excitability, confusion, hostility and irritability. Physical activity should be alternated with quiet periods of perceptual-task development. It is possible the physical educator might prescribe that the "highly charged" youngster avoid gross motor participation for a day or more until a more settled condition would permit him to benefit from activity.

Although the relationship of motor skill development and perceptual and cognitive development is still largely unknown, basic motor activities included in the program should be geared to perceptual development. Indications are that balance, agility, coordination and manipulative skills are desired. Ball skills, utilizing balls of varying shapes, weights and consistencies, involving catching, throwing, kicking, and ocular tracking are very desirable. Fitness development may prove important to the weak child and for enhancing a child's concept of his body. Simple trampoline tasks seem to free the body to explore space and experiment without a ground based contact. Swimming has proved an important activity for developing contralateral movements and for developing a relationship with a new environment that does not limit the bodily actions. A well-rounded program of physical activities, utilizing basic motor patterns and developing skill competence will negate the necessity of highly competitive athletic participation until the child is physically and emotionally ready and asking for an extended horizon.

References

1. Ayres, A. Jean. "Patterns of Perceptual-Motor Dysfunction in Children: A Factor Analytic Study." *Perceptual Motor Skills* 20: 335; 1965.
2. Bower, Eli M. *The Education of Emotionally Handicapped Children.* Sacramento: California State Department of Education, 1961.
3. Cratty, Bryant J. *Perceptual-Motor Behavior and Educational Processes.* Springfield, Illinois: Charles C. Thomas Publishers, 1969.

4. Despert, J. Louise. *The Emotionally Disturbed Child-Then and Now.* New York; Robert Brunner, Inc., 1965.
5. Kephart, N.C. *The Slow Learner in the Classroom.* Columbus, Ohio: Charles E. Merrill Co., 1960.
6. Malpass, Leslie F. "Motor Skills in Mental Deficiency." *Handbook of Mental Deficiency.* (Edited by N.R. Ellis). New York: McGraw-Hill Book Co., 1963.
7. Witkin, H. A., and Asch, S. E. "Studies in Space Orientation and Further Experiments on Perception of the Upright with Displaced Visual Fields." I, II, III, IV. *Journal of Experimental Psychology* 38: 325-327; 455-457; 603-614; 762-782. 1948.

PRECEPTS AND CONCEPTS ON RESEARCH AND DEMONSTRATION NEEDS IN PHYSICAL EDUCATION AND RECREATION FOR THE PHYSICALLY HANDICAPPED

T. J. Nugent

I speak to you not as a recreator or physical educator, per se, but as an individual who is responsible for, and must answer to, twelve professional disciplines and services in a very comprehensive program of rehabilitation and education of individuals with severe permanent physical disabilities. I am, in continuum, responsible to more than 200 individuals with almost every cause and manifestation of severe permanent physical disability, who are pursuing college life in a normal fashion and doing just about everything and anything that you and I might possibly think of doing (and frequently a few things that you and I would not think of doing). We do not excuse any individuals from active participation in physical education, physical therapy or functional training. Through purposeful programming, we have had better than 80 percent voluntarily participating in recreational activities of all dimensions. I would emphasize my great respect for, and appreciation of, the role of physical education and recreation, when properly conceived and exercised, in the total rehabilitation scheme. I find it to be one of the most effective tools in rehabilitation.

Let us begin from the "normal", the "acceptable", and deviate as little as possible when considering research, demonstration, or program development related to the recreation of the physically disabled. Let us recognize that, young or old, they are individuals first, each unique in himself or herself, and with individual differences, one of which may be a specific physical disability. *They are not disabled individuals.*

Let us focus on the ability of the individual, his desires, motivations and satisfactions, rather than on the disability. As we enter into research, demonstration and program development, let us not, by focusing on the disability, make false assumptions which are in themselves limits on the productivity and potential of the individual with a disability.

Let us recognize that, individually and collectively, they have the same aspirations, interests, talents and, in most instances, the same skills as all people. They have the same basic social-psychological needs and would like to travel the same avenues that you and I have been privileged to travel in fulfillment of these needs. It is the fault of our society as a whole, and more particularly, of the apathy, lack of awareness and sensitivity of our professional leaders that these individuals have not been privileged to travel these avenues. It is not the fault of the disability or the individual with the disability.

If there is justification for physical education and recreation in the life of anyone, it is even more justified in the life of the individual who is physically impaired and who, because of apathy, attitudinal barriers and physical barriers, has been prone to inactivity or has had inactivity unjustly imposed upon him. While the physical implications are readily recognized, the social and psychological are not so readily identified nor easily evaluated. My observations and experiences lead me to ascertain that, through self-enterprising participation in physical activities and recreation, the individual with a disability does (1) realize self-identification (even self-justification), (2) overcome self-consciousness, (3) develop self confidence, (4) have the opportunity to emote naturally, (5) have the opportunity to respond to successes and failures from which, hopefully (with good program leadership), should result social graciousness, (6) develop a concept of self which is fundamental to forward movement with any measure of success, and (7) have the opportunity for self evaluation along with self satisfaction because recreative activities do come to a conclusion.

Before embarking upon programs of research and demonstration, we should consider the following needs.

1. *Greater involvement of individuals with disabilities in on-going programs.* Their lack of involvement and the nothingness which has surrounded these individuals are the bases for their present concept of self. Therefore, when questioned or observed, they tend to reflect this nothingness or the attitudes of those about them. They have met so many denials or have been made to feel that they cannot do so many things, that studies and observations with[illegible] greater involvement, would tend to come up with incomplete, if not totally wrong answers.

2. *Greater involvement of professional people.* Professionals engaged in research and demonstration should become more involved with these individuals so that they can distinguish between that which is real and that which is the manifestation of limitations and impositions upon the individual with a disability.

3. *More interdisciplinary studies.* We must not approach the problem from the perspective of a single discipline and thereby further segment the individual. There is much greater need for interdisciplinary studies relating to all aspects of individual growth and development and their relationship and contribution to each other. Only when we take this approach can we really find the answers to what, when, where, why and how.

4. *Greater exposure.* We must have greater emphasis on demonstration where there has been leadership to make known what these individuals can do and how they can do it. This approach will eliminate much waste of time, money and effort on studies which merely put us at the threshold.

5. *Consideration of individuals in functional terms.* We must not consider individuals with disabilities categorically and by name of the disability, per se, but by functional concepts. We know, quite conclusively, that individuals with many causes of disability (various diseases and various types of injuries) are functionally compatible and are helpful to each other and to total program success. To assume that a person with a given title or identification of disability must function in a given way is as wrong as assuming that all fat people are lazy and all redheads are tempermental.

6. *Functional design of programs and facilities for everyone.* In constructing our programs and in constructing the facilities to accommodate our programs, we should design for the functioning of the individual and not in such a way as to force the individual to function within the limits of the design. This is particularly true wherein individuals with a disability are to be considered. We must not plan and build for the mythical "average man". We must plan and build so that everyone, regardless of their unique individual differences, will have the opportunity to participate and to develop to his fullest potential.

7. *Consideration of the relationship of presentation to success.* The mode of presentation and/or instruction is paramount in the effectiveness and success of the program.

8. *Utilization of normal conditions in research studies to increase their meaningfulness.* We must readily recognize that certain settings, particularly well-defined institutional settings and domiciliary care centers, are themselves limiting to the individual and therefore place certain limitations on the results of certain research, demonstration and study. It is of paramount importance that we involve individuals with disabilities in programs in normal environs with normal objectives and the normal reciprocities of people with people, and people with things if the studies are to be meaningful.

9. *Wide-reaching review of current programs and research developments.* Last, but not least, we should look vigorously about us to see what is already being done. As an example, neurologically and orthopedically handicapped persons, including the very involved high level manifestations such as quadriplegia and quadriparesis, are already participating in wheelchair football, wheelchair basketball, wheelchair baseball, wheelchair track and field, wheelchair archery, wheelchair fencing, wheelchair square dancing, wheelchair bowling, some forms of gymnastics, swimming, golf, and many lesser activities. The blind are participating in bowling, wrestling, judo, swimming, dancing, baseball, and many other activities. More important, they are participating in these activities in normal settings with very few deviations from normal rules of competition. For the most part, we find it necessary to change only those rules which relate to how one gets about.

Examples of current programs include:

a. The National Wheelchair Basketball Association is 21 years old and has held 21 successful annual tournaments. The Association is made up of seven conferences and 44 teams from coast to coast. The records are comparable and in some instances better than intercollegiate records. They play by N.C.A.A. rules with only two modifications and one addition.

b. For twelve years, there has been national competition in track and field, archery, swimming, bowling, table tennis and other activities. This competition has been known as the National Wheelchair Games. The severely disabled and the lesser disabled, young and old, throughout the United States are very much involved and look forward each year to the National Wheelchair Games.

c. Since 1952 there has been international competition in almost all of these activities, beginning with two countries and currently including more than 400 athletes with physical disabilities from over 30 nations who have qualified through vigorous local and national competitions.

d. There are many, many other examples wherein the aspirations and abilities of individuals with all causes and manifestations of severe disability are being demonstrated.

Yet, so few of our professional people are aware of these opportunities, so few have seen any of these activities, and even fewer are themselves engaged in these activities. It is an indictment of the professions of recreation and physical education that almost all of these groups have been founded by, are managed by, and are coached by laymen. The municipal and/or school physical education and recreation programs and personnel are seldom, if ever, involved. Where are our professionals? Whenever difficulties are encountered by any of these groups, most of which are self-sponsored and self-sustaining (a significant factor in itself), it is more often than not attributable to lack of good professional leadership. On the other hand, some of these laymen are doing a far better job than some of our "deep in the rut" professionals might be expected to do.

Recent authoritative textbooks in the field show no awareness of these things that are going on because there hasn't been enough involvement and perhaps not enough demonstration. However, I can assure you that these groups are demonstrating (I use that word in a healthful fashion) and are willing to demonstrate.

10. We have already been privileged to do, or are currently doing, many basic studies in many areas such as attitudes, motivation, social significance (values), psychological factors, energy expenditure, heart function and response, qualitative and quantitative evaluations of cardio-vascular function and response with particular emphasis on peripheral circulation, respiratory function and response, follow-up studies and specific skills and activities. It is amazing what we have already learned and yet we have only begun to scratch the surface.

Although recreation for the individual participant might be, and should be, recreation for the sake of recreation itself, we, as professional people, would be very naive and very short-sighted not to recognize that we have a tool through which many things may be learned and which might accomplish many things in the interest of individuals with physical disabilities. All other services within our program benefit from our students' involvement in physical and recreational activities.

Because of the position in which so many individuals with disabilities have found themselves, because of attitudinal barriers and man-made physical barriers which have excluded them from those things which we all take for granted, they so often do not or cannot reflect what would otherwise be their normal aspirations, interests and abilities. Therefore, involvement is a fundamental must. I often use these simple analogies with my students. "How do you know whether or not you like strawberries, if you haven't eaten strawberries?" and "You don't eat oranges because you don't like apples!" We can readily note the success of those who do participate and the troubles of those who do not, although at times it might be a delayed action or reaction.

Let us in our research, demonstration and program development find the means to include our individuals with disabilities in normal environs, in a normal manner, in normal and acceptable activities from which we might logically expect normal responses and benefits and thereby add dimension and meaning to our efforts. Much of this is being done. How can we become more sensitive to it?

The presence of a problem is the absence of an idea.

THE STATUS OF RECREATION FOR THE HANDICAPPED AS RELATED TO COMMUNITY AND VOLUNTARY AGENCIES

Morton Thompson

This paper attempts to present a broad picture of recreation research and demonstration needs in Recreation for Handicapped, using as a take-off point the nationwide survey conducted by a master's degree student at N.Y.U. in 1965. This survey, co-sponsored by the National Recreation & Park Association and the National Association for Retarded Children, was concerned with recreation programs conducted by Community Recreation Departments for (1) the mentally retarded and (2) the physically handicapped.

Two thousand (2000) recreation departments, all affiliate members of the National Recreation & Park Association, were asked by post card to indicate whether they provided recreation services for either or both of these major groupings of handicapped children.

Four hundred and twenty-seven (427) recreation departments responded to the initial survey request. All of these departments signified that they were providing the disabled with some type of recreation program.

A four-page questionnaire was then sent to the 427 recreation departments to gather detailed information about their specialized programs. Two hundred and two (202) recreation departments responded to the final questionnaire. This number (202) was 48% of those communities who claimed they provided some type of program. This final group of respondents constituted approximately 10% of the 2,000 recreation departments originally contacted in the survey.

Survey Findings

Eighty-seven per cent (87%) of these communities administered their programs for the non-handicapped. Frequently (40% of) these communities placed the handicapped in special groups by mental age, chronological age, or by handicap.

In many instances (2/3), the public recreation program was conducted in cooperation with other community agencies and voluntary organizations. About one-third (1/3) of these cooperative efforts existed between the public recreation agency and health agencies such as hospitals, the Red Cross, and welfare agencies.

Other cooperative ventures were developed with schools (special and regular), and with private and civic groups in the community.

The cooperating agencies usually provided the major share of the volunteer leadership and transportation.

The survey indicated that 91% of the public recreation departments provided leadership, 73% facilities, and 68% supervision for the programs for the handicapped.

Staffing

The staffing patterns for the ill and handicapped programs were not clearly delineated in the survey. The 202 communities reported the following details:

54 Directors
87 Supervisors
193 Leaders
and 40 part-time workers

In addition, more than eleven hundred (1100) volunteers were reported as participating in the recreation programs.

Financing the Program

Fixty-six per cent (56%) of the communities provided at least 90% of the financing through tax funds. Thirteen per cent (13%) contributed NO tax funds to the programs. For maintenance costs, 67% of the communities financed the ENTIRE costs from tax funds.

Transportation

These costs were largely contributed by cooperating agencies. Sixty-four (64%) per cent of the communities provided NO assistance for transportation from tax funds, although 11% did bear the entire burden of transportation.

Activities

Considerably more communities offered opportunities for the mentally retarded than for other specific groups. Activities for the homebound available through public recreation departments were very limited.

The ten (10) most frequently offered activities for the mentally retarded, in sequence, were:

> arts and crafts, games, picnicking, nature activities, music performance, dramatics, spectator sports, special shows, carnivals, and hiking.

For the physically handicapped, the ten (10) most frequently offered activities were:

> arts and crafts, games, picnicking, music performances, spectator sports, nature activities, special shows, dramatics, carnivals, and fishing.

It might be noted that the first ten activities for both groups were pretty much the same and quite similar in rank order.

Facilities

The communities offering facilities for use by the mentally retarded included, in rank order:

playgrounds (177), swimming pools (90), parks (88), community recreation centers (73), and day camps (61).

Provisions for the physically disabled included:

playgrounds (83), swimming pools (77), parks (68), community recreation centers (57), and day camps (46).

Based upon the 1965 survey, and the progress evidenced throughout the United States during the past three years by community interest and development of new recreation programs for the handicapped, I believe that I can safely assume that there are today between four and five hundred community recreation programs being conducted for the handicapped population of those communities.

Might we not ask ourselves why there are so many more communities in this country still lacking in recreational services for the handicapped?

The reasons for this tragic condition have been very clearly defined by our professional consultants, researchers and practitioners. They are:

1. Recreation departments have, in the past, never budgeted or planned for the handicapped.
2. Public recreation and voluntary agencies in the past lacked staff members with adequate training and experience in recreation for the handicapped.
3. Recreation departments were always geared to mass programs and gross statistical records needed for annual budgeting.
4. Programs for the handicapped were more costly, based upon the need for attention to individual and small group needs.
5. Architectural barriers existed everywhere in the community as well as in the recreation facilities.
6. Transportation was expensive, and in most instances was inappropriate or completely lacking.
7. Problems of accident and liability insurance.
8. Severe physical disability.

Now most of these problems are gradually being overcome. Colleges are providing education and training in this specialized area of recreation. The federal government and private foundations are providing grants for research, training and demonstration projects throughout the United States.

In fact, to a large extent, the results of a variety of studies and demonstrations are responsible for much of the improvements found in our present recreation services for the handicapped.

Improved techniques in public relations and the news media are educating and informing the public about the needs and values of recreation for the handicapped.

The handicapped, and the parents of handicapped children, as individuals and/or members of local boards and health agencies, are demanding their "recreation rights" as citizens and taxpayers.

Architectural barriers are being eliminated through a nationwide drive. At last count, I recall at least 32 states with legislation making it mandatory that all new construction of public buildings and facilities be designed so that they are accessible to, and usable by, the physically handicapped.

Recreation departments as well as many voluntary agencies are hiring specialist–educated and trained in techniques and methodology of therapeutic recreation.

I predict–we will find the future very bright for recreation for the handicapped in the community setting.

For example, only during the past few years all three townships in Nassau County–comprising a population of 2 million people–started programs of recreation for handicapped children. All three are conducted and funded by their public recreation departments. The programs are free–they are open to all disabilities between the ages of 6 and 21–and they are conducted after school twice weekly and on Saturdays.

The program in Hempstead, New York–I am their Consultant–is conducted in schools in the community setting. Transportation with matrons and radio-equipped buses is provided free on Saturdays with central pick-ups strategically located in the township which is comprised of 850,000 people–the largest populated township in the United States.

The children–all with learning disabilities–retarded, emotionally disturbed, brain-injured, physically handicapped, and multi-handicapped–are grouped together primarily by chronological age and performance level. Ten (10) to fifteen (15) children recreate in small rooms with a special education teacher and recreation specialist working together with each group. In addition, the groups rotate to special activities including arts and crafts, music, and physical fitness and games.

On Saturdays a special event such as a magic show or carnival is produced during the hours of 11:00 a.m. to noon. After a lunch break, those children signed for swimming are provided with a swim program of instruction and water play.

Trips into the community are scheduled periodically for both the young and teenagers on Saturdays.

Periodic evaluations on each child are made by the teaching staff and assistants. In-service training and parent conferences are a continuous part of the program.

The grouping by mixing the disabilities has worked out extremely well. The pilot phase of this program–4 months–has been sensational. Many of the children are less apprehensive; they are learning skills and interests; coordination has improved; social awareness has developed and most of all they help each other–the emotionally disturbed helping the physically disabled, the brain-injured helping the retarded and vice-versa.

Specific examples–two children (autistic), after two months in the program, spoke for the first time–another, an 8-year old boy, emotionally disturbed, always angry, cursing and striking out, now kisses the teachers and helps other children.

The pilot project was so successful that the town budgeted $112,000 for this program for 1969-70, and added a day camp program for this summer at a town beach club on Long Island with the program and transportation free to all handicapped residents.

I believe we can say "recreation for the handicapped" has a bright future, to motivate this future we must provide research, improve standards, provide for adequate education and training, eliminate architectural barriers, develop new techniques and methods–refine the old–publish our methods and research techniques, provide seminars and workshops for the professional, volunteer and the interested citizens and develop excellent public relations and publicity techniques for our profession.

Let us not forget–"Recreation is a Basic Human Need"–the handicapped must not be forgotten!

THE STATUS OF RECREATION FOR HANDICAPPED CHILDREN IN INSTITUTIONS

Gerald S. O'Morrow

Within the last three decades, and possibly four, the conception of the function of institutions and/or residential facilities for the care and treatment of handicapped children as custodial institutions have been replaced by the conception of institutions whose purpose is re-education and reintegration of handicapped children into the community. Today, efforts of general physicians, psychiatrists, pediatricians, and obstetricians to allow handicapped children to develop to their maximum potential are being supplemented by those of other institutional and residential facility personnel.

This paper attempts to report on what is known about recreation programs for handicapped children, promising practices engaged in, and my own subjective view concerning all aspects of recreation for all handicapped children in institutions and residential facilities.

In preparing this paper, I directed letters to nearly forty recreation administrators in a variety of institutional settings concerned with providing activities for handicapped children and to state level chiefs or coordinators of activity therapy. To say the least, I was quite taken back, not by the response which was excellent, but by the many letters that stated only a limited program was being provided for these children or it was the same type of program that had been provided for years. This is as a result of staff shortage, lack of funds, or major concern for adult residents. Only a small percentage of the articles and studies that I received described an actual program with a group of handicapped children; these did not always present uniform data on the characteristics of the group members, the nature of the program and the activities utilized, or the results obtained. Therefore, it was difficult to analyze many programs and activities. In addition, a review of professional journals concerned with various handicaps, and these dating back over a period of three years, produced little information about recreation activities or programs for handicapped children within institutions. It appeared that ICRH, Challenge, Recreation in Treatment Centers, Therapeutic Recreation Journal, Recreation for the Ill and Handicapped, and JOHPER are the only journals discussing recreation activities for handicapped children. This is to be expected, however, if recreation is to project its value it must start appearing in other types of professional journals. In addition, it must begin a program of public information about the value of recreation through TV series, motion pictures, audio-visual aids and the likes. Likewise, up-to-date materials must be available to professional organizations and individuals through professional recreation organizations and agencies (NTRS, AAHPER).

Today, vast sums of money are being spent, a variety of persons appear to be attempting to effect change in current practices, and many persons are beginning to pose questions about ways in which recreation efforts might be furthered. Leaders in the field must consider new approaches to old programs so as to assist handicapped children to develop their maximum potential.

While I want to focus attention on four areas which appear to be receiving special attention within institutions today regardless of the type of handicap it seems feasible to indicate that recreation plays a part in the institutional life of handicapped children. How big a part is difficult to determine. For example, institutions usually offer two or three types of programs; one concerned with learning skills and another concerned with putting these skills into practice. The third program being geared toward treatment. However, it appears from personal discussions and letters that I received, that it is difficult for other institutional staff members to always differentiate between the first two types of programs or there is a feeling on the part of institutional staff that recreation is noting more than "fun and games." Thus, there is no follow through, or someone at the administrative level is asking questions about the value of recreation activities when it comes to monies and personnel. Yet the need of institutionalized handicapped children are the same as other children. At the same time, what is wrong with handicapped children just having fun – it is a natural way of growing-up.

I also noticed in reviewing activities that a large number of activities are activities that would not be found on a community playground. If they are, they are usually associated with metropolitan programs. On the other hand, some institutions attempt to create activities with a home-like atmosphere; something similar to one's family recreation room or backyard.

In a most generalized way, institutions indicated that they try to see the child or resident as human beings and not as children who are ill, disabled, or handicapped; this is secondary. The nature of recreation activities or programs appear to provide these children with an opportunity to explore new activities, develop skills, and find success. Since these children fail to find success, a majority of the activities provided de-emphasize intense competition especially as it relates to games and sports. Activities are presented so that the participants are stimulated to discover (or re-discover) the joy and sense of pride that accompanies skill acquisition as well as developing the ability to participate.

Considering all letters, studies, research findings, and personal experience, regardless of the type of handicapped, recreation activities help: (Please keep in mind that I will refer to only one or two examples within each heading.)

1. to increase the growth and development of the child. It appears that all institutions have some form of a program concerned with physical fitness. A number of studies on the effectiveness of recreation activities with severely and profoundly retarded indicated an increase in physical fitness, fewer days of personal illness, and better appetites. Other studies showed the value of toys to improve the five senses, dancing to improve physical coordination as well as the playing of musical instruments to improve motor coordination.

2. to develop a self-image or awareness of self. Some institutions provide activities that encourage and give children the opportunity to explore the possibilities of their bodies through experimenting with movements and rhythms.

3. to reduce isolation by building a relationship with others. In developing this area, all institutions appear to provide social recreation activities which emphasize the social interaction between the sexes through co-educational activities. Also, activities that require a group or team approach.

4. to take the child away from himself or redirect his attention. This investigator found that nearly all institutions reported hobby type of clubs–collecting, building, and the like. These clubs were either personalized or group projects.

5. to re-establish constructive self-attitudes. A western institution takes motion pictures of their children while on field trips so that the children can view their behavior following such trips.

6. to reduce aggression tendencies while at the same time providing for approved outlets for hostility. Many institutions indicated this as a major goal for recreation activities. Also activities such as wrestling, tumbling, kickball, and others of a similar nature.

7. to stimulate interest in new activities. An eastern state psychiatrist working with emotionally disturbed girls (eight years old and above) found a marked improvement in their behavior when the children started participating in a private community recreation agency. He further emphasized that these children were from markedly socially and economically deprived homes, and therefore, such participation opened up whole new areas of recreation rather than just watching TV and playing in the street. A school for the deaf this past summer provided a six week enrichment program including fishing, hiking, swimming, softball, shuffleboard, horseshoes, and croquet.

8. to prepare the child for activities of daily living. There was considerable reference in articles and my own personal experience indicated that activities such as bean-bag toss, bowling, pencil and paper games, and verbal games assist in the development of addition and the skills in being able to add as well as English concepts. Other institutions use music to contribute to learning the alphabet through the names of notes. Some institutions have developed recreation activities which stress the factor of safety. Safety is involved in learning to travel to and from scheduled recreation programs, proper use of sharp tools used in art and craft programs, and knowing the limitations in moving about recreation areas.

9. to assist the child to find success. This also was a major goal of recreation programs. A number of research findings and recreation administrators indicated that recreation activities enabled children to experience success, feel important and gain self-esteem for the first time in their life. Emphasis was put upon teaching the children skills that they will need to meaningfully participate in play experiences with other children their own age.

10. to possibly prepare children for adult roles. There are five institutions preparing EMR for recreation program aids and helpers. It is hoped that as these children advance in age and skill that they can be placed in the local community recreation department.

Evaluating desirable practices, three or maybe four practices appear worthy of note; namely, principles of recreation activities, multidisciplinary approach, recreation counseling to children prior to discharge or release from the institution, and utilization of community resources while still a resident of the institution.

Examination of these four practices appear to be found more often in those institutions which employ a large number of professionally trained therapeutic recreation specialists, whether it be a public or private institution. These practices are also found in those states which have well written plans for providing comprehensive health services. It is interesting to note that in a recent issue of Challenge (May, 1968), Mr. Hillman commented that only seven of 51 states, had task forces or study groups dealing with recreation.

Regarding principles of developing or leading recreation activities (the first focus of attention) it is desirable to (1) accept the participant as a human being, regardless of the handicap; (2) involve the child as quickly as possible in activities after admission or acute treatment; (3) start the activity at the existing level of the child and lead him to progressive levels of adaptation through the use of graded activities. (It is well known that children grow and develop at different rates; therefore, certain recreation activities are more functional at certain levels than are other activities, and that there is a carryover from activities in the institution to leisure activities following release or discharge.); (4) the therapeutic recreation specialist should be constantly aware of the child's health when considering activities, and (5) the attitude of recreation personnel may affect the nature of the child's participation in activities.

The second focus of attention is on the multidisciplinary approach. Therapeutic recreation specialists are becoming more and more members of the multi disciplinary approach to the care and treatment of the child. In this process of being transplanted into a new milieu, he is required to render a new service. In effect, he is required to consider the whole person. This means that he can no longer function independently of other team members since no one discipline is comprehensive in its services. This approach recognizes the child as a whole person with the focus of attention varying from one aspect of the child's living to a consideration of many aspects–family recreation interest, physical environment, school and the like.

True understanding of handicapped children can never be achieved by isolated units of professional competency. The need of joint effort by representatives of disciplines involved is important not only to promote complete understanding of the handicapped, but to unite professional competence for a common cause. No profession is so broad, or so important that it can afford to stand apart and aloof from others when all deal with different phases of a single humanity. However, teamwork is not a collection of opinions from professionals each considering the child from his own view in a static fashion. It is not a high level Gallop Poll of unilateral decisions. It does not lean individually on group responsibility, but each member, independently, secure in his own profession, contributes as an equal partner.

Perhaps I seem overly concerned about the teamwork or multidisciplinary approach. However, it has been my experience to observe therapeutic recreation specialists considering recreation as the only answer to all things. Teamwork should imply a close, cooperative, democratic, multiprofessional union devoted to a common purpose–the best treatment for the fundamental needs of the child.

One of the most significant practices engaged in is recreation counseling (the third area of attention). While this practice is found more often in psychiatric institutions, and with adult patients, it is beginning to come into focus with handicapped children. The extension of recreation counseling service to handicapped children has resulted in bringing a new type of service to children and in providing the outpatient child with an additional service to aid him in his social and recreation adjustment. Counseling implies a helping process, the aim of which is to enable the individual to utilize new resources that he now has for enhancing his capacity for social function. Thus, recreation counseling implies a helping process to further explore recreation needs and interest of the child in order to enable him to identify, locate, and use recreation resources in the community.

The lack of social skills and competencies is considered a major problem. What is done in the institution to help him prepare for his community return greatly affects his chances for success.

Time precludes an in-depth discussion of recreation counseling and for that matter, even a general discussion; however, it is noteworthy to mention, that the counselor is concerned with the recreation adjustment of the whole child. No other member of the multidisciplinary team is equipped or qualified to work in this area. The counselor has to adapt a holistic attitude. This means responding to the child not solely in terms of the disability or handicap, but as a total personality with a constellation of physical, psychological, and social needs.

Traditionally, many of our handicapped children have been treated in specialized, frequently isolated institutions, remaining in closed quarters both day and night until home visits or releases were indicated. However, I am extremely glad to see the increased concern on the part of institutional staff members to utilize community facilities in their recreational programming (the fourth focus of attention). In this regard, it is noted that more convenient location of institutions can aid in the child's improvement. Location in or near the community which it serves is a concrete demonstration that the institution is part of that community rather than a skeleton in the community closet. Equally important, such location permits access to community recreation resources and participation in community affairs. Certainly the type of programs developed by an institution that sees itself as part of the total resources of the community will be different from those developed in an institution seeing itself as being outside of the community.

Participation in community recreation activities not only tends to give handicapped children a reasonably clear-cut status in our society, but provides orientation to and training for outside living. This aspect is extremely important if we expect handicapped children to function adequately in society. Society sets norms for behavior, dress and appearance and those who most conform to these are most likely to be accepted in the social sphere. Handicapped children in most instances, are not always endowed with these characteristics. However, the institutional recreation specialist must continue to work to bridge the gap between the institution and the community. Recreation personnel from both sides of the street (meaning the community and institution) must continue to work together as part of the whole recreation profession.

In my last few minutes I would like to consider the aspect of recreation research. While I was asked to focus on "the state of the art," I believe it is important to comment on recreation research. In my opinion, it is apparent that there is a lack of research in our institutional settings. Because the service setting of the institution is the primary laboratory for research into activity, it must contribute more than it appears to be doing now to the knowledge of the use of activity in care and treatment. Unfortunately, recreation research, as indicated previously is not being conducted.

Examination of the studies reported earlier, as well as others, indicate that there were many unanswered questions, and also that the methods by which certain problems were attacked demonstrated some inadequacies.

The most striking characteristic of the articles and research studies reviewed was the great differences between investigators concerning the presentation of objective evidence and the usefulness of certain practices. A number of writers presented as evidence simple assertations that their program was of value. Others represented impressions as evidence.

Both types of data are of value. However, progress in this area of recreation must be based upon careful testing of many generalizations.

While it is true that handicapped children cannot be compared in an over-all way (that is, one handicapped child cannot be easily evaluated as being more handicapped than another) certain dimensions of their behavior in activities can be compared. For example, the "degree of participation" of a blind child can be compared with that of another in the same activity. Though there is not yet a generally accepted set of criteria by which various aspects of the "degree of handicap" might be evaluated, it would appear incumbent upon investigators to clearly define or at least tell the reader which aspects of the handicap's behavior he is focusing upon and comparing in his attempt to determine the extent to which the activity effected changes in behavior.

Closely associated with the problem of specifying the "degree of handicap" is the problem of deciding upon the method to be used in measuring the degree of participation. Various techniques have been used (rating scales, participant-observation techniques and the like). There are a number of questions concerning the use of these techniques which, to my knowledge, as well as others have not yet been adequately answered. For example: How can improvement in participation on the part of a deaf child be compared with his improvement in verbalization? To what extent does this same child maintain his improvement in recreation activities after his release from the institution? In another area, how can the contribution of participation in recreation activities be evaluated in the long-term care and treatment of the mentally retarded? Not only is it necessary to develop adequate instruments for determining changes, but such questions as the above must be answered if a refinement of the concept of "improvement" is to occur.

Also, in the examination of the literature and personal experience almost all objectives of activity programs were designed to affect the child's relationships with others. But, if these articles are examined from the standpoint of what is learned about interpersonal relationships compared with what is learned about activities, relatively little information is found about the former and a great deal of information about the latter. Even in discussions with recreation personnel about activity programs, there appears to be little recognition of the importance of relationship.

It is inevitable in research that investigators must interpret the meaning of the data they gather. One of the problems involved in such interpretation is that different points of view are likely to interpret behavior in a variety of ways. It would be fruitful, therefore, for investigators to present as many interpretations of the behavior which appears likely, and to check consistently each of these interpretations against the child's behavior.

Many handicapped children now in our institutions and residential facilities can be helped though progress may be slow. However, a "research attitude" must be developed on the part of the institutions toward the use of recreation as a tool in the care and treatment of handicapped children as well as on the part of therapeutic recreation specialists.

Actually, this picture of the status of recreation for handicapped children in institutions is not completely negative as it may seem to sound. Here and there across the country, institutional recreation departments are beginning to staff and program for the recreation needs of these children. It must continue to grow if these children are to be given the opportunity to develop to their maximum potential.

STATUS OF RECREATION FOR THE HANDICAPPED SCHOOL CENTERED

George T. Wilson

School centered recreation programs for the handicapped are usually conducted: (1) in special resident or day schools; (2) in special classes during the regular school day; and (3) those conducted in or on school or other authorized facilities by school personnel during hours outside of the regular school day, i.e., after school, evenings, weekends or on holidays. School centered programs may be conducted (1) by the schools; (2) by a separate yet integral arm of the school system such as a School Recreation Department; (3) a Recreation/Park Department; or (4) by a private agency. The degree of cooperation between the school and other cooperating agencies varies widely from joint planning and joint implementation of activities to tenancy of minimal cooperation.

The original impetus for economical and maximum utilization of school buildings for leisure time pursuits can be traced back to the text "The Wider Use of the School Plant," a publication appearing about the year 1912. The "Cardinal Principles of Education" have also included the "worthy use of leisure" as one of the objectives. Although the concept is well over a half century old, the practice and implementation of truly school centered programs outside of the school day for normal or handicapped children is far from being a widespread reality.

A gleaning of the literature and a detailed study of "resumes of Projects for Handicapped Children Funded under PL 89-313 Amendment to Title I, ESEA, for the Fiscal Year 1967" indicates that most school centered recreation projects for the handicapped were conducted in special resident or day schools or as adjuncts to the exceptional education classes. The "Resume" also indicates that some 48,263 children were served in all disability classifications. Of this number 28,031 were mentally retarded; 9,507 deaf; 5,214 emotionally disturbed; and 4,575 were blind. Only 936 were classified as crippled. There are, however, some notable activity program exceptions such as the Milwaukee Recreation Division's programs for handicapped children conducted cooperatively with the Exceptional Department of the Milwaukee Public Schools. This program has been considered to be a "model" by the Southern Illinois University Information Center on Recreation for the Handicapped.

In referring generally to children as handicapped we are considering those who are: (1) profound, trainable or educable mental retardates; (2) severe, moderate, or mild physically or multipally handicapped, including the blind and deaf; and (3) the emotionally disturbed. The children so considered may be homebound, institutionalized, in special schools or classes, or may be in the "normal" school population. Some educators broadly view the culturally disadvantaged as functionally handicapped also, but this discussion excludes that group. A danger in classifying or categorizing children in any manner is the tendency to place a child in a "slot or a box" and thereby conveniently keep him there by virtue of the classification. This should not be the case.

In posing the question "why recreation for the handicapped child?," recreation and education (the transition line is very fine indeed) must transcend concepts as "filling leisure time," and "doing good for disabled children." A sound rationale which is either presently or ultimately measurable by valid and reliable instruments is a great necessity.

Simply put, such a rationale must submit that all children learn only through sensory "input," i.e., through sight, hearing, smell, taste and touch. Handicapped children need a literal "pouring in" of stimuli (input). A multi-sensory approach through activity is called for. Programs must include physical, cultural, social, self, and special activities, all of which are geared to providing maximum motivation through continual adaptation. The "input" of activities should produce whole child improvement, the outcomes of which are expressed in terms of human competencies. These competencies are: (1) mobility; (2) manual; (3) language (verbalization, reading, writing, numbers concepts, and listening); (4) social relationships, and (5) self image. The "outcomes" also become "input" providing feedback which establishes a chain of unceasing human actions and reactions. Recreation is the process by which this takes place.

A primary task of research is to seek out, perfect and develop instruments to measure improvement in terms of "outcomes." Evaluation must also seek continuous program improvement within a framework of "enjoyment" for the participant. Another essential to assessment of school centered programs is by "the kids" expressing themselves simply in meaningful terms such as "it was fun." Likes and dislikes, attitudes, appreciations, and understandings may also be assessed. Staff evaluations related to program effectiveness are important too. "Outsiders" taking a critical look at the program (but thoroughly understanding its objectives) can do especially effective evaluations. Such outside determinations all too frequently indicate that activity largely reflects staff rather than patron choices. A rationale and evaluation as indicated appears to have implications for "measuring" recreation outcomes for "normal" children as well.

A number of additional concepts are inherent to the rationale suggested. One is the emphasis on the whole child rather than the handicap. It should be remembered that we are working with children first, and then with disabilities. Another tenent is that the most suitable placement for a handicapped child is in a "normal" program. There must, however, be a practical realization that in many instances a sheltered environment must be provided. Perhaps more basic to this group of concepts is that of the importance of love, empathy, and a firm belief that handicapped youngsters have truly great potential. These concepts must be translated into action through activity and implemented by the professional recreator assisted by a staff of professionals, paraprofessionals and lay leaders representing a multi-disciplinary team approach. Among the many assisting members of the team are doctors, educators, clergy, therapists, psychologists, counselors, social workers, materials resources producers, parents, and others. Activity programs for the handicapped must be parent centered as well. An integral part of a school centered program for the handicapped child must provide for parental education and involvement. We have come to realize that disadvantaged children need a "head start." So do handicapped children. They can get it in part and economically through a sound parent education program.

The "1967 ESEA Projects Resume" referred to previously, indicated that crippled children were the least served group. This may or may not reflect one of the major problem areas of recreation for handicapped children in general and for crippled (orthopedically) children specifically. This major problem area is transportation which frequently requires smaller adapted bus units, hydraulic lifts, specially trained drivers, and widely scattered bus pickup points for participants. Transportation for the handicapped consequently is expensive. In addition, all too often children who could benefit most from school centered recreation programs are unable to participate because parents, agencies, or the sponsoring agency may either be unwilling or unable to provide the necessary funds. Transportation is also a critical problem particularly for the profound and trainable retardates, and emotionally disturbed children.

If public recreation departments in general and school centered in particular are to fulfill their stated objective to help meet the recreational needs of all, they must include the ever increasing number of handicapped children needing such service. Fears related to liability, lack of special expertise, possible injury, and concerns about low staff-patron ratio must be viewed in proper perspective as the needs are becoming more clearly defined. The future challenge to school centered activity for the handicapped is to implement; to innovate; to provide developmental activity for the pre-schoolers and the severely disabled; to develop educational programs for parents; to assist in developing valid and reliable measurement instruments; to evaluate carefully; to develop avocational guidance and counseling programs; and to exercise a community leadership role in school centered programs for the handicapped.

RESEARCH–RECREATIONAL CAMPING FOR ALL HANDICAPPED

William H. Freeberg

A search of the literature concerning the values recreation camping contributes to the education, recreation, socialization and rehabilitation of all handicapped individuals results in the following:

1. Most of the evaluations regarding the values of camping to the handicapped prior to 1960 can be regarded as being based on empirical evidence.
2. The most common kinds of empirical evaluations concerning recreation camping for the handicapped prior to 1960 was concerned with social improvements, behavior modification, and learning skills in camp activities.
3. Prior to 1960 most of the values believed derived from a recreation camping program for the handicapped were theoretical and very little scientific research is available to support the theoretical assumptions.
4. Prior to 1960 and, to a large extent, even today most of the recreation camping programs for the handicapped were designed primarily to provide the handicapped with a different environment; provide a group living experiment with teaching techniques, diversify the living situations with mixed population groups, and make special efforts

through activity programs to improve maintenance skills, social skills and physical skills.

5. Prior to 1960 the opportunities for handicapped individuals receiving a recreational camping experience was quite limited. During the past ten years there has been a phenomenal increase in the total number of community day camps, agency and institution resident camps, and private resident and day camps for the handicapped.

6. The personnel charged with the responsibility of organization and administration of most camps for the handicapped are not research minded and many are not research oriented. The primary emphasis on most recreation camps for the handicapped is still on providing a good vocational-recreational experience for the campers.

7. Prior to 1960 a scant number of capable scientists were devoting their time and energy to research in the values of recreation camping for the handicapped.

8. Prior to 1960 valid and reliable instruments of research to measure the theoretical claims of recreation camping for the handicapped were not available. This was particularly true in the physical fitness, educational and social adjustment areas.

9. Because of recent legislation at the federal, state, and local level, which encourages and requires educational, rehabilitational, and recreational programs for the handicapped, there have been scores of qualified scientists entering the field of work for the handicapped. They in turn are now doing research and encouraging research by others in a diversified number of areas. They are also developing valid and reliable tools of measurement for others to scientifically do research. (One of the most notable is Dr. Lawrence Rarick's standardized physical fitness test for retarded.)

10. Several universities have established recreational camping laboratories to serve various kinds of handicapped individuals. The camping laboratories are used on an inter-disciplinary and an intra-disciplinary basis for conducting educational, social and rehabilitative experiments; for use as field problems, practice teaching, and clinical experiences; for gathering data in specialized research associated with university departmental requirements, and for providing recreational and therapeutic services to the handicapped.

11. Some of the more current projects in research now being conducted or under consideration for research associated with recreation camping for the handicapped include: sensory-motor perception, physical fitness, language development, physiological improvements, improvement in maintenance and recreational skills, behavior modifications, pre-vocational preparation, and social skills.

Review of Related Literature

So far as the present writer can ascertain, no study has dealt with the effective outcomes accompanying a camping experience for physically handicapped adults. This is understandable when one considers the almost total lack of opportunities provided for these people. Numerous authors have developed theoretical statements regarding benefits of a camping experience. Yet little concrete research in support of any theoretical assumptions has been reported.

In searching the literature for scientific evidence of proven values that camping provides for the physically handicapped, there was little evidence found where valid and reliable research methods were used to substantiate the claims made in many of the professional magazine articles.

The three most significant scientific research projects concerning recreational camping for the handicapped have been conducted within the past few years. Dr. Thomas A. Stein's project entitled "Some Affective Outcomes Accompanying a Camping Experience of Physically Handicapped Adults," (1963) deserves special consideration because it is the most scientific and thorough research concerning physically handicapped camping available. Dr. Barbara Bateman has conducted two research projects entitled, "A Pilot Study of Mentally Retarded Children Attending Summer Day Camp," (1966). Dr. Bateman made scientific evaluations through the use of a battery of tests, all of which are valid and reliable tests for measurement. The tests involved several areas of educational interest. They include research concerning changes in intelligence, changes in language scores, changes in sensory-motor scores, and parent and counsellor attitudes.

Dr. Frank Hayden has completed one of the most intensive research projects on physical fitness for the retarded in a day camp setting. His research project was entitled, "Physical Fitness at Camp Shriver," (1967). Several areas and concepts of fitness are evaluated and Rarick's modified version of the AAHPER Youth Fitness Test is assessed for practicality and validity.

These three scientific research projects could serve as a basis for methods and techniques of research to be applied with some recommended modifications for all recreation camping programs for the handicapped. It is true that new dimensions will have to be added and validated.

Dr. Stein's study more nearly represents the scientific purpose of this conference which demonstrates the kind of research needed in recreation camping programs for the physically handicapped.

Included in the study group of this investigation were all first-year and second-year adult campers who applied, were accepted, and attended a two-week camp session at Camp Wawbeek, a camp for the handicapped owned and operated by the Wisconsin Easter Seal Society, during the 1960 and 1961 camp seasons. Another group of campers who had 9, 10, or 11 years of continuous camping experience in this same camp was included during the second year of the study. Over the two-year period, a total of 57 campers with an age range from 21 to 50 years were studied.

Exploration was advanced in two stages covering a period of two years. In stage one, 2 groups were established consisting of 16 first-year campers and 10 second-consecutive-year campers. In stage two, similar groups were established including 9 first-year campers, 11 second-year campers, and a third group consisting of 11 veteran campers.

Home visits were made before the subjects came to camp to interview them on their vocational, educational, and recreation-seeking activities; to measure self-acceptance, or the congruence between their self-concept and ideal self-concept, through use of the Q-technic; and to measure patterns of interest by means of the *Kuder Preference Record.* The Q-technic was used with the subjects at the beginning and at the end of the two-week camping experience. During camp, subjects were systematically observed over a 9-day period on an intermittent basis involving 54 separate observations for each subject, to record his activities and social interactions. Several months after camp another home visit was made to repeat the procedure employed during the initial visit. The purpose was to attempt to ascertain changes in patterns of interest, activities, and self-acceptance following camp and also to assess the home and community environment of each subject. The data were then analyzed statistically for the whole group, for subgroups of first-year, second-year, and veteran campers, and on an individual basis through a modified case study approach.

In reviewing the findings it should be clear that they apply only to the physically handicapped adults who attended Camp Wawbeek during the 1960 and 1961 seasons. The following six concluding statements are based directly on the aforementioned hypotheses.

1. Self-acceptance, as measured by Hilden's Q-instrument, is enhanced in some physically handicapped adults, while others appear to experience a decline or no significant change in their self-esteem. It was found that 6 persons made a significant positive change during the experience, while the remaining 51 made no significant change at the 5 percent level of confidence, i.e. there was a greater than 5 percent probability that any differences found for these 51 subjects were due to chance. This same conclusion holds true with respect to self-acceptance when the total groups of campers first entered the camp environment. In this affective characteristic 4 persons showed a significant increase, 6 showed a significant decrease and 47 displayed no significant increase, 6 showed that such changes that did take place were probably influenced by the person's background, the problems he faced upon entering the camp situation, and his success or failure in dealing with these problems while in camp.

2. Results of use of the Q-technic show that 6 subjects displayed a significant increase in self-acceptance from the end of camping to a period 5 to 6 months following the experience while 9 persons decreased in self-acceptance and 42 showed no significant change during this same time. Although most campers did not show a marked change, this finding must be tempered by what happens to the person after he leaves camp.

3. Only five people, during the two-year study, gave evidence of relating camp activities to their home environment and there appeared to be little awareness of potential transfer of interest. Both the interest inventory and the interest-activity questionnaire show evidence that, except in the above instances, little if any change in pattern of interests or activities accompanied the camping experience. In those few cases where the camping experience was directly responsible for new home or community activities, such transfer appeared to be accompanied by a conscious seeking out of such possibilities.

4. It was found that 11 subjects made a marked increase in their social participation while observed in the camp situation, 11 subjects decreased notably, and 35 showed little or no quantitative change. In generalizing about the total groups of campers in the two stages of investigation it appears that little or no change in social participation occurred during the camp experience. However, as in the study of self-acceptance and interest changes, individual differences were found. The problems of previous social experience, critical incidents during camp, and the attitude of the individual toward himself, his disability, and other persons with a disability are some of the variables that appeared to have a bearing on each camper's social participation. It is concluded that, while the majority of subjects tended to remain reasonably stable in their social interaction, some displayed sharp increases or decreases in their active participation in social situations and that, where these changes were observed, they usually followed some

self-enhancing or traumatic incident that appeared to affect the subject's attitude toward themselves, the environments, or both.

5. It is concluded that no significant differences exist betweeeen the two subgroups of first- and second-year campers in terms of change in the three affective outcomes under investigation. This finding indicates that, if change is a function of camping, two weeks of camping in each of two years is insufficient for this experience to influence the stability of the affective characteristics under study or to overcome the influences of the person's home and community environment.

6. On the basis of the analysis for grouped differences during the second year of study, it is concluded that veteran campers and first- and second-year campers do not vary significantly as groups in the three affective areas under consideration, self-acceptance, pattern of interests, and sociability. Upon inspection of individual results of changes, variations were found in all three areas, both positive and negative, for all three subgroups of campers. This suggests that the influence of camping is an individual matter and that, even over many years of such experience, such influence does not appear to manifest itself on a grouped basis.

Perhaps the greatest contribution that a study of this nature can make is in terms of the questions that can be asked about the individual, home, community, and camp environments as a consequence of investigation results.

Dr. Barbara Bateman conducted two studies on Fitness for the Retarded during the summer of 1965, the Kennedy Foundation supported a pilot study (Bateman, 1965) which explored the benefits of day camping for mentally retarded children. Three groups of subjects were studied: campers, counsellors, and parents. The major findings included: (1) the parents were uniformly and highly favorable in their appraisal of the benefits of camping to both the campers and to the remainder of the family; (2) the first-year counselors became measurably more accepting of retarded children after camp than they were before, and they became more positive in their appraisals of retardates' abilities; (3) the campers, as a total group, made small but measurable gains in most of the cognitive, sensory-motor, language, and socialization areas tested; (4) there were substantial and consistent differences among the gains shown in the four camps studied; and (5) observation of camp activities and instructional procedures (Painter, 1965) suggested possible approaches to planning and teaching camp activities to maximize retarded campers' cognitive and social as well as physical development.

The primary purpose of the second study was to devise and evaluate techniques for maximizing the benefits of camping for mentally retarded children. The study took place within an ongoing camp and utilized existing camp staff and facilities in order to achieve practicability and applicability to other camps. The project director and three assistants participated in the camp program daily for the duration of the camp in an attempt to introduce cognitive activities into the camp program to effect gains in camper growth by applying psychological and educational principles to a variety of camp activities.

Basically, two types of studies were done: (1) those involving comparisons of the test score changes of this year's campers and comparison subjects; and comparing these groups with last year's; and (2) those involving analysis and change of activities within the camp. The methodology for these latter *in situ* studies was of two basic types: (1) observation and recording of various types of social interaction studies and (2) observation and intervention to bring about behavior modifications utilizing a case study approach.

The following tests were administered to a total of 25 retarded children who attended summer camp and 24 controls before and after camp: Binet L-M, Draw-a-Man, three subtests of the Illinois Test of Psycholinguistic Abilities (ITPA), the Cognitive Maturity and Language Concept Inventory, (Follett Publishing Co., 1967), and the Beery-Buktenica Test of Visual-Motor Integration (Follett Publishing Co., 1967), a pegboard test and a walking board test.

The test change score study revealed a pattern of gains for the 25 MR children which was highly similar to gains made in last year's best camp. IQ gains averaged about 3 points. The 24 control subjects averaged less than one point gain in IQ. The campers also made gains in language areas; however, the only sensory-motor area in which their performance bettered that of the controls was on the walking board.

The case studies are presented with suggestions for more rigorous and controlled applications of the techniques attempted. Even with many methodological weaknesses and mistakes, the principles of bringing about specific behavioral changes of the kinds attempted seemed highly successful.

The overall conclusion of this study is that retarded children, like all children, learn what they are taught. This is not meant as a truism in any sense, but as the most important single guideline in planning a camp program for mentally retarded. The first step must be determine with great precision what is to be taught in camp, and only then to plan the activities which will best achieve these specific goals. This is actually a reversal of the usual procedure of planning activities and then asking what the children might learn from them.

Dr. Frank Hayden's study may be briefly stated as follows: 113 educable and trainable mentally retarded children attending a summer day camp were tested on the seven items of the A.A.H.P.E.R. Youth Fitness Test with three items modified, as suggested by Rarick, for use with the retarded. The two testing sessions required a total of about three hours. Acceptable scores were obtained from almost all of the children.

Comparisons with national norms showed that the campers median performance ranked at the 7th percentile for normal children and the 23rd percentile for educable children. Poorest performances were recorded on the 300 yard run and the flexed arm hang. About 10% of the children demonstrated exceptional athletic potential with performances above the 90th percentile for normal children.

Evaluation of the scores in terms of proposed standards for a national awards program indicated that, with very little practice and training, 40% or more could win an award, 20% could win an advanced award and 5% could win a special award for exceptional achievement. The standards were considered reasonable for use with educable and upper level trainable retarded.

Summary

1. There are an ever-increasing number of day and resident camps being conducted for all handicapped individuals. The total number is significant enough to be of major concern to educators, rehabilitation and social work professionals and recreation professionals.

2. There is empirical evidence to prove that recreational camping has a great deal to offer in the education, rehabilitation, recreation and social life of handicapped individuals.

3. The environmental setting, selection of campers and staff, program content, and planned group living all are essential in order to expect maximum benefits in a recreational camp.

4. Adequate tools of measurement to produce scientific evidence concerning the values of recreation camping for the handicapped are now sophisticated enough for reliable and valid research.

5. There is still a lack of qualified individuals who are interested and doing the needed scientific research in regard to recreation camps for the handicapped.

Recommendations

1. Increased effort must be made to encourage university students to enter the field of recreation and camping for the handicapped.

2. Efforts must be made by all professional organizations to encourage, support, and initiate research involving the values inherent in a camping program for the handicapped.

3. The A.A.H.P.E.R. and N.R.P.A. should work together and make every effort to establish some kind of inter-agency and inter-disciplinary research center. One area of concentration should be in the area of recreation camping for the handicapped.

4. It would not be unreasonable to request federal assistance to establish a research center similar but not nearly as comprehensive as the National Institute of Health, which would devote itself to research on an inter-disciplinary nature involving physical education, recreation, special education, and certain areas associated with the behavioral sciences in problems associated with handicapped individuals.

It would be more reasonable *at this time* to pool our scientists and scientific knowledge in a central area.

References

1. Bateman, Barbara. "A Pilot Study of Mentally Retarded Children Attending Summer Day Camps." Two Research Projects. (Unpublished). Washington, D.C.: The Joseph P. Kennedy Jr. Foundation (719 13th St., N.W.), 1965 and 1966.
2. Hayden, Frank J. "Physical Fitness and Camp Shriver." Research Project. (Unpublished). Washington, D.C.: The Jososeph P. Kennedy Jr. Foundation (719 13th St., N.W.), 1967.
3. Stein, T.A. "Some Affective Outcomes Accompanying a Camping Experience of Physically Handicapped Adults." *Rehabilitation Literature* 24: 194-200; July 1963.

Selected Bibliography – Camping for the Handicapped

Blind

Case, M. "Camping for Blind Adults." *Recreation* 46A: 104-106; May 1953.

Cosmopolitan. "Blind Summer Camp." *Cosmopolitan* 141: 48-49; August 1956.

Frampton, M.E., and Mitchell, P.C. *Camping for Blind Youth: A Bibliography.* New York: New York Institute for Education of Blind, 1949.

Hutchins, J.M. "Camping for Blind Children." *Camping Magazine* 25: 23; March 1953.

Twersky, J. "A Part of My Life: Camp for Blind Children." *Recreation* 46: 137-138; June 1952.

Whitney, E.D., and Walters, G.T. "Cooperative Camping: Golden-agers and Blind Campers at Camp." *Recreation* 49: 291; June 1956.

Day

Adler, L. "Day Camp for Children in Bed: Country Home for Rockaway, New York." *Recreation* 44: 34-35; April 1950.

Musselman, V.W. *The Day Camp Program Book.* New York: Association Press, 1963.

National Association for Retarded Children. *Day Camping for the Mentally Retarded.* New York: National Association for Retarded Children (420 Lexington Avenue), 1962.

National Association for Retarded Children. *Directory of Day Camps Serving the Mentally Retarded.* New York: National Association for Retarded Children (420 Lexington Avenue), 1967.

National Recreation and Park Association. "Day Camp for Mentally Retarded." *Recreation* 56: 136; May 1963.

Scheer, R.M., and Shrape, W.M. "Social Group Work in Day Camping with Institutionalized Delinquent Retardates." *Training School Bulletin* 60: 138-147; November 1963.

Spear, D. "Daniel Boone Roams Again: Handicapped Day Camping." *Recreation* 53: 116-118; March 1960.

Stockhomer, R. "Day Camp for the Mentally Retarded." *Recreation* 56: 236-237; May 1963.

Wolf, M. "Day Camp with a Difference." *Parents Magazine* 41: 50-51; May 1966.

Deaf

Herbert, E. L. "Hearing Impaired Children in Community Recreation and Camping Programs." *Journal of Speech and Hearing Disorders* 23: 610-612; November 1958.

Rotter, P. "Camping for Deaf Children." *Volta Review* 61: 209-211; May 1959.

Volta Review. "Summer Camps for Deaf Children." *Volta Review* 64: 192-199; April 1962.

Diabetic

Alabama Medical Association. "Camp Seale Harris: Two-Week Camp for Diabetic Children." *Journal of Medical Association of Alabama* 31: 132-134; October 1961.

American Medical Association. "Camping Fun for Diabetic Youngsters." *Today's Health* 44: 50-53; June 1966.

Gapard, N. J. "Summer Camp for Diabetic Children." *American Journal of Nursing* 63: 108-109; June 1963.

John B. "At the Point of a Needle: Camps for Diabetic Children." *Today's Health* 35: 26-29; June 1957.

Maryland State Hospital Medical Journal. "Camp Med Chie for (Diabetic) Children." *Maryland State Hospital Medical Journal* 11: 67-69; February 1962.

Skipp, J.C. "A Florida Summer Camp for Diabetic Children: Value of Using an Existing Camp and of Affiliation with a University Medical Center." *Journal of the American Medical Association* 184:4: 312-314; April 17, 1963.

Emotionally Disturbed

Acuff, S.H. "Camping, Transition Between Hospital and Home for the Adult Mentally Ill." *Journal of Health, Physical Education, and Recreation* 32: 24; May-June 1961.

Ackerman, O.R., Smith, B.K., and others. "Patients Go Camping in Indiana." *Mental Hospitals* 10: 16-18; June 1959.

Archer, P. "Holiday Camp for Psychiatric Patients in England." *Hospital and Social Service Journal* 68: 169-170; February 14, 1958.

Barker, B.W. and Weisman, M.N. "Residential Camping for Chronic Mental Patients." *Journal of Rehabilitation* 32: 26; July-August 1966.

Department of Recreation, Indiana University. *Camping for Emotionally Disturbed Boys.* Bloomington, Indiana: Department of Recreation, Indiana University.

Jensen, S.E. "Camping for Emotionally Disturbed Children." *Canadian Mental Health* 12: 22-24; May-June 1964.

Life. "Camp to Help the Disturbed: Ranaop-Anchorage, New York." *Life* 45: 95-101; September 8, 1958.

Ortego, M.J. and others. "Psychiatric Patients at Camp." *Nursing Mirror* 118: 75-78; April 24, 1964.

Pugh, S. "Emotionally Disturbed In-Service Patients Go To Camp." *Hospital Management* 95: 86; June 1963.

Rosen, H.G. "Camping for the Emotionally Disturbed." *Children* 6: 86-91; May 1959.

General

American Camping Association. "Programs for the Handicapped Children." *Camping Magazine* 26: 32; April 1954.

American Camping Association. "Serving the Handicapped Camper." *Camping Magazine* 24: 27-27; June 1952.

Burns, G.P. "Camping for the Handicapped." *Journal of Health, Physical Education and Recreation* 21: 312; May 1950.

Burns, G.P. *Program of the Modern Camp.* New York: Prentice-Hall, 1954.

Carter, J.L. "Camping Together: Handicapped and Non-Handicapped Girl Scouts." *Exceptional Children* 21: 2-4; October 1954.

Case, M. "Camping." *Exceptional Children* 24: 179-180; December 1957.

Crawford, M.C. "Provide the Handicapped with a Rich Camp Experience." *Camping Magazine* 28: 18; December 1956.

Frey, L.A. "Open Horizons Offer Handicapped Children Real Camping Experience." *Camping Magazine* 31:1: 8-9; January 1961.

Hartley, W., and Hartley, E. "There's a Summer Camp for Every Child." *Parents Magazine* 41: 51-53; April 1966.

Hospital Topics. "Palsied Patients Go 'Wheelchair' Camping." *Hospital Topics* 40: 49-50; October 1962.

Jackson, J.P. "Growing Up With Family Camping." *American Forests* 72: 48-50; May 1966.

Muscular Dystrophy Association of America. *A Report on An Experiment in Camping for Children with Muscular Dystrophy.* New York: Muscular Dystrophy Association of America, December 15, 1955.

National Recreation and Park Association. "Camping Unlimited: Handicapped Children." *Recreation* 55: 146; March 1962.

National Society for Crippled Children and Adults. *Directory of Camps for the Handicapped.* Fifth edition. Chicago: National Society for Crippled Children and Adults, 1966.

New York Times. "Pilot Holiday Camp: Mentally Handicapped Children." *Times Edition Supplement* 2571:278; August 28, 1964.

New York Times. "Summer Camp for the Handicapped: Camp Oakhurst." *New York Times:* July 29, 1956.

Park, L.D. "Camping for Severely Disabled Adults." *Journal of Health, Physical Education and Recreation* 29: 22-23; March 1958.

Radir, R. "A New Camp for the Handicapped." *Recreation* 45: 546; March 1951.

Rudnetsky, J. "Pulling for Health: Rotary Camp for Crippled Children on Long Island Sound." *Rotarian* 91: 38-39; August 1957.

Schoenbahm, W.B., and Hovik, L. "Building Camp Facilities for the Handicapped." *Recreation* 52: 94-96; March 1959.

Spear, D. "Handicapped Children Can Go to Regular Camp." *Camping Magazine* 31: 31-34; April 1959.

Spencer, S.M. "These Kids Go Camping on Crutches: Camp Daddy Allen." *Saturday Evening Post* 226: 28-29; June 12, 1954.

Sternberg, R. "Structured Camping for the Exceptional Child." *Recreation for the Ill and Handicapped* 10: 4: 5; October 1966.

Thompson, M. "Cerebral-Palsy Day Camp." *Recreation* 54: 141-142; March 1961.

United Cerebral Palsy Association. *Day Camping for the Cerebral Palsied.* New York: United Cerebral Palsy Association.

Victor, M. "The Handicapped Go Camping." *Recreation* 46: 459; January 1952.

Witt, U. "Camp for the Crippled: Camp Wawbeek, Wisconsin." *Today's Health* 30: 58-60; August 1952.

Heart Damaged

New York Times. "Camp with Heart, Sprout Lake Camp, Verbout, New York." *New York Times* 39: August 4, 1957.

Sellwood, J.J. "Camping for Cardiac Children: Los Angeles County Crippled Children's Society." *Camping Magazine* 30: 20; January 1958.

Mentally Retarded

Allen, R.M. "Note on Mixed Summer Camping with Retardates and Non-Retardates." *Training School Bulletin* 54: 50-51; November 1957.

Anderson, R.J. "Canoeing and Wilderness Camping with Teenage Institutionalized Educable Mentally Retarded Boys." Special project paper. Mankato, Minnesota: Mankato State College, 1964.

Burnes, A.J. "A Pilot Study in Evaluating Camping Experiences for the Mentally Retarded." *MR/Mental Retardation* 4:4: 15-17; August 1966.

National Association for Retarded Children. *Directory of Residential Camps Serving the Mentally Retarded.* New York: National Association for Retarded Children (420 Lexington Avenue), 1967.

Roberts, M.M. "Camping Program for the Mentally Retarded." *Recreation for the Ill and Handicapped:* July 1958.

Smith, J.S. "Camping with the Mentally Retarded." *Recreation* 46A: 214; September 1953.

Taylor, E.A. Jr. "School Camping is Rewarding for Retarded Children." *Journal of Health, Physical Education, and Recreation* 28:5: 32; May-June 1957.

Wyant, E. "Demonstration Camp Program for Retarded." *Recreation* 57: 305; June 1964.

Therapeutic

Ackerman, A.R. and others. "Group Camping as a Therapeutic Experience with Psychiatric Patients." *Canada Journal of Occupational Therapists* 26: 73-80; September 1959.

Ackerman, O.R. "Group Camping As a Therapeutic Experience with Psychiatric Patients." Part I. *Recreation for the Ill and Handicapped.* July 1959. Part II, "Evaluation of Camping As a Therapeutic Experience with Psychiatric Patients." *Recreation for the Ill and Handicapped.* October 1959.

Godbaut, R.A., and Hurwitz, S. "Role of the Infirmary in a Therapeutic Camp for Boys." *Nursing Research* 9: 23-31; Winter 1960.

Littell, R. "We Concentrate on the Possibilities: S. Guedbergs Camps in Scandinavia." *Reader's Digest* 72: 217-220; May 1958.

McNeil, E.B. "The Background of Therapeutic Camping." *Journal of Social Issues* 13: 1; 1957.

Morse, W. C. "An Interdisciplinary Therapeutic Camp." *Journal of Social Issues* 13: 1: 1957.

Root, L. "Report on the Corrective Therapy Rehabilitation Programs at Camp American Legion." *Journal of the Association for Physical and Mental Rehabilitation* 18: 2: 49-51; March-April 1964.

Freeberg, W.H. "Recreational Camping for the Retarded." *Recreation in Treatment Centers* 5: 8-12; September 1966.

Freedman, S. "School Camping: Experiment to Help the Mentally Handicapped." *Camping Magazine* 32: 34-35; March 1960.

Garman. V., and Clark, A.J. "Camping for Mentally Sub-Normal Patients." *Nursing Times* 60: 840-841; June 26, 1964.

Good Housekeeping. "Very Special Camps for Very Special Children." *Good Housekeeping* 150: 108; February 1960.

Kunz, J.W. "An Institutional Approach to Camping for the Mentally Retarded." *Recreation in Treatment Centers* 5: 30-31; September 1966.

Larson, R. "Mentally Retarded at Camp Silver Lake Camp in Minnesota." *Recreation* 50: 77; March 1957.

TIMES' PASSAGE – UNCHANGING TIMES

Burton Blatt

Introduction

This has been a most enjoyable – yet soul searching and, at times, painful – experience. It has forced me to reflect upon my own professional beginnings and retrace my earliest convictions *vis a vis* physical education and recreation for the handicapped, to assess where we have been, where we are, and where we appear to be heading. As I have mentioned, this introspection has not brought unmixed joy; neither, however, has it been without some very real rewards – both of which experiences I will try to share with you this afternoon.

My earliest research on this problem, not quite twenty years ago, was on the relationship between certain physical factors and intelligence. As I tried, in recent days, to reconstruct those conditions that led me to that research, I was forced to return to my original notes and manuscripts – long neglected by me and, most fortunately, completely forgotten and buried in journals that were hardly read on the dates of their issuance. Once again, I saw the names and reviewed the works of those who participated in a rather modest but very lengthy scholarly debate concerning the nature and correlates of physical abilities. From DeBusk, Mead, Pyle, Lutz and Heaton who published during the first quarter of the century to Paterson and his classic *Physique and Intellect,* published in 1930, to the more recent contributions of Flory, Dayton, Ray, Boas, Carlson, Dearborn, Rothney, Moench, Kulcinski, Brace, Sloan, and Turnquist there had been, by the time I completed my last investigation in this area in 1956, a flood of studies on the relationship between every conceivable physical factor and every domain of behavior and intelligence. To conclude that this impressive body of research was of trivial consequence insofar as deepening our understanding of handicapped people and how they might profit from physical education and recreation programs would, I believe, be unfair but less inaccurate than to conclude that this wealth of research led to a renaissance of understanding and programing in physical education and recreation for all children, in general, and for the handicapped, in particular.

Speaking as one who is, now, an outsider taking distance, viewing the progress that has been made as only an outsider can view such progress, I have been forced to conclude that little has changed – really changed – for the handicapped and the effects of physical education and recreation on their lives. In the dozen or so years that have elapsed since my very intimate involvement with the issues concerning us here today, I now observe the state of things and must conclude that time has passed but times are unchanged. The handicapped continue to be neglected in the schools, in our institutions, and in our community recreation and camping programs. Physical education and recreation for the handicapped is hardly any more a part of teaching training programs in special education than it was when I was a student. Special education teachers continue to take children to "recess". The moderately retarded continue to be excluded from the after school and community center recreation programs. Summer camping for the handicapped continues to be an experimental or model program when, by now, it should have become a bonafide part of a community's or commonwealth's commitment. There are those among us who still continue to engage in foolish polemics concerning the relationship between strength or motor ability or height or weight and intelligence – still not realizing that the unimportance of such findings is only exceeded by the absolute triviality implicit in the kinds of questions they obtain from.

The remainder of this paper concerns itself with an estimate of unmet needs and problems relative to the development of research and training projects in physical education and recreation for handicapped children.

Research

People who engage themselves in the research of an issue have a more humble view of the illumination they can bring to the issue than those who are "working at it" in the clinics, the schools, or wherever. On the other hand, I have found that the researchers are much more optimistic, than the latter group, that the issue eventually will be resolved or brought under scientific control. It isn't, I believe, that the researchers are more humble people; many I have known are rather arrogant. Nor do I believe that they are intrinsically more optimistic concerning human nature and the ability to modify it. The advantage enjoyed by researchers, and difficult for others to attain, is their ability to take distance and form an idealogical detachment from an issue, its consequences in general, and its influence on their personal lives. It is very difficult to be dispassionate and disinterested in the face of certain issues – even for the very best researchers. However, both their training and the way they must go about their business make such objectivism possible, if not certain, for them where it is almost impossible for others to achieve. It is this objectivism that permits researchers to better understand the hidden variables that many of us never appreciate. It is this comprehension of the complexity of an issue that causes the researcher to be humble in the light of his ignorance and optimistic and faithful to his scholarly creed and the eventual triumph of science.

Research in physical education and recreation for the handicapped is an excellent example of the discrepancy between the dispassionate scholarship of the researcher and the impressions and convictions of almost everyone else. Why it required literally hundreds of studies to demonstrate the very modest (when it exists at all) relationship between physical characteristics and the intelligence of all individuals with intact central nervous systems (including those who are mentally retarded) was due to, at least, three factors. First, it is only in recent years that we have begun to appreciate the meaning of such terms as "emotional disturbance", "mental retardation", and other labels referring to handicapped populations. We have begun to understand, much better than heretofore, that each of these terms is a symbol for an extraordinarily heterogeneous group who bear some similarity in one important facet of functioning, while they present with striking dissimilarities in practically all other facets of functioning. Therefore, it is not surprising that great confusion was generated by the findings of earlier studies purporting to demonstrate relationships between physical abilities and intelligence. One study reported significant linear relationships, another reported significant curvilinear relationships, and a third no relationships. And, for many years, the scientific debates raged, to the delight of sophists and pedants. It mattered little that included in retarded groups were children with demonstrable brain damage, children with intact central nervous systems who were then called "cultural-familial", and children with unknown or unreported physiological conditions. Children with differing etiologies or physical conditions were either mixed together or their conditions were completely unaccounted for; their important characteristic was that each was mentally retarded. Study after study was completed involving the mentally retarded and other handicapped children, each such study assuming that mental retardation has a global integrity of its own and that one could actually study the relationship between intelligence and motor ability. Unfortunately, it required several generations of such research to teach us that the most one could hope to do was study the relationship between the so-called "cultural-familial retarded child" and motor ability or the relationship between the so-called "brain injured retarded child" and motor ability – if these are, in fact, important things to study.

A second factor, fanning the flame of debate and confusion concerning the physical capabilities of the handicapped, was the carefully developed solid research findings of a few great pioneers, on the one hand, and the prejudice, stereotyping, and "folk beliefs" of all too many informed laymen and professionals, on the other hand. By the early 1940's, Paterson's classic study and Dearborn and Rothney's longitudinal report were well known and had "laid by the heels" the notion that a serious relationship exists between physical factors and intelligence, especially when such studies separate out children with neurological impairment (who are, by far, a very small minority of the mentally retarded population). However, in spite of such studies, the near-universal understanding of such matters referred to the axiom that "a weak back goes with a strong mind" or, ironically, its antithesis that "a weak back goes with a weak mind" – when neither is the truth or, more accurately, neither proposition sheds very much illumination on understanding either mental retardation or physical capabilities.

Lastly, something should be said about the abundance of the above kinds of studies, especially in the light of the little they contributed, scarcely anything that they have resolved, and the great confusion they have perpetrated. In a few words, these studies have been very easy to do. It is well known that, among researchers and, especially doctoral students, people engage not in what they wish to do but in what they are able to do, not in what is important but in what is possible, not in what is risky but in what is safe and gives assurance that there will be a completion. The research in physical education and recreation for handicapped children has, for the most part, been research that could be done, rather than research that should be done. Although I am not as deeply involved in such matters today as I was a decade ago, with rare exceptions (most of these represented by individuals in this room) I find the situation to be in a state of inertia and timelessness. Time passes but times remain unchanged.

Before I leave this problem and you in a state of suspended animosity, I want to make some recommendations concerning research:

1. A colleague of mine, Frank Garfunkel, once said that there isn't anything inherent in disability to produce handicap. Therefore, it isn't the primary responsibility

of behavioral science to find out whether or not this is true, but to make it become true. We have supported far too many studies purporting to demonstrate the differences between one group another group or the liabilities of one type of child in contrast with another type of child. We have constructed and promoted research seeking to determine whether a child could prosper in a recreation program or a camping program or a special motor training program when, all these times, we should have promoted and encouraged research that sought to make it come true that a child would learn after participation in these special projects. Stated another way, I am less enthusiastic than ever before about the possibility that "all or nothing" research has anything to offer relative to either our understanding of the problem under study or the pragmatic solution to that problem. I am less enthusiastic than ever before that we gain anything in learning that trainable children do better in one kind of recreation program rather than a second kind of recreation program or disturbed children prosper significantly in dance therapy A in contrast to dance therapy B or to no therapy.

2. The above leads directly to my second contention that the study of particular methods, for the purpose of demonstrating their efficacy, is more or less fruitless and whatever is demonstrated will, eventually, be contraindicated by subsequent research. As I have indicated in previous papers, I don't believe that it is particularly useful for us to search for superior methods to teach physical education or recreation or any other school discipline. Such "all or nothing" studies of methodologies prove little. By "all or nothing", I mean studies that compare the efficacy of one method as contrasted with the efficacy of another method on several other methods or compare the superiority of one type of individual as contrasted with the superiority of another type of individual. As methods do not exist outside of a psycho-educational setting, and as they are implemented by unique groups of human beings, only a naive researcher could conclude that the demonstrated superiority of his method has very much generalizability to other educational settings. As I have discussed elsewhere at length, my research preference would be to study children, and how they change, in different educational environments. To state this another way, I believe it is more defensible, as well as important, to generalize about children than it is to generalize about procedures. It is from evaluations of varieties of methods, with varieties of children, in more or less formal and informal settings, utilizing teachers with heterogeneous backgrounds, that hypotheses will be generated that may lead to theories concerning human development and learning. It appears to me that, in this kind of strategy, theory building has a central function in the field of pedagogy and psychology – and is central to those here who have concern for the development of research and demonstration projects in physical education and recreation for handicapped children. My bias is that our emphasis on theory construction must shift from methodological concerns to human interactive ones.

3. Every research program is confronted with a decision to be made concerning the number of variables and the size of sample to be studied. Consequently, in light of limited resources, manpower, and time, to the degree that the researcher does not restrict the variables of the study, he will have to restrict his sample, or vice versa. My own preference is to restrict samples rather than variables. In studying so complicated a problem as that involving handicapped, on the one hand, and teaching them, on the other hand, the suppression of variables to be studied and accounted for may result in a kind of distorted impression of the study results that, actually, mislead the researcher or tell him

very little about that which he has so diligently attempted to investigate. Therefore, although it is desirable to recruit as large, as unbiased, and as representative a sample as possible – especially if one is interested in the generalizability that a study may provide – in respect to the aforementioned realities and compromises that must be made, I could not help but recommend that the research payoff will be greater if compromises are made with sample size rather than variable size.

4. Leading from the above discussion is my recommendation that a great deal more work is needed before we truly comprehend the varieties and natures of physical education and recreation settings. Education and psychology are not just beginning to appreciate the dictum that, before the researcher attempts to manipulate variables, he should first describe the natural setting. The recent work of Oscar Lewis and Erving Goffman in sociology and Philip Jackson and Seymour Sarason in psychology and education shows hopeful signs that times are changing, if grudgingly. What are so desperately needed at this time in physical education and recreation are studies describing how and under what conditions handicapped children are admitted to such programs, how and under what conditions they perform in such programs, their attitudes and the attitudes of their instructors, and the interactive effects of such programs and the other children involved, as well as the families of the handicapped children.

5. If experimental studies or survey analyses are undertaken, the researcher will be confronted with several problems that he must deal with. Central to all of these is the control of bias – his own and that which accompanies any manipulation of individuals or treatments. In particular, evaluations of children during an experiment must be accomplished, at each testing period, with the utilization of evaluator blinds. Without such blinds, one must assign little confidence in the reliability or validity of the data. Two other factors that must receive very careful consideration are researcher procedures for randomizing children into various treatment groups and methods of controlling and dealing with research population attrition. My reviews of even the most recent research literature indicate that either the importance of these factors has been little understood by those engaged in research or, in spite of an understanding of such matters, our colleagues continue to make no provisions for the development of blinds, and assign individuals and treatments through matching rather than randomization procedures, taking no account of those who either drop out of the study or, in some other way, were lost to it.

6. Lastly, something must be said about those who are rarely, if ever, studied by physical educators – or any other educators. The world pretends that back wards in institutions do not exist, because we are ashamed to admit that they do while we do. Practically all of the research that has been completed, to date, relative to physical education and recreation programs for the handicapped concern the less handicapped, the mildly involved, and those who appear more nearly normal and more nearly like other children. Although there have been some modest efforts with the trainable mentally retarded, especially in such demonstration programs concerned with summer camping or after school recreation, almost no basic or applied research is available on the more severely retarded or the more severely disturbed or the more severely physically handicapped. I am convinced that – from both humanitarian and scientific views – we can no longer neglect those children who have been so shamefully neglected in the past. We must convince ourselves that it is within our power to make it become true that all

children can learn through a deeper understanding of their physical selves, their movements, and their emotional feelings and reactions to their bodies and what they can accomplish. I believe that scientists will, eventually, comprehend the nature of language and how it is learned through an understanding of the deaf child and how he learns language. I believe that the domains and correlates of intelligence will, eventually, be fathomed by man, and the key to this understanding will obtain from our study of the most severely retarded learners. I believe that a better theory of movement and body mechanics will evolve as we better understand the movement of the cerebral palsied child. I believe that the emotionality of athletics will puzzle us less as we unravel the emotionlessness of the autistic child. To me, it is obvious that we have neglected the study of and the treatment for a group of children that humanity demands we give attention to and our own scientific self-interests compel us to consider.

Training

In fields of education such as ours, all research and all demonstration programs have eventual objectives – and, all these have something to do with the delivery of more expensive, more elaborate, more productive programs or services. Therefore, in a very telling way, all research and demonstration programs lead to the need for more or different or better trained personnel. In the face of incredible shortages now, we cannot help but ponder the uselessness of research and demonstration programs without devoting serious attention to recruitment and training. The following are my thoughts concerning the nature and conditions of learning, who can learn, and who can learn to teach. It is hoped that, in the following, I will be able to convey the very strong mutual relationship between research and training, and between both of these and demonstration and programming. By this I mean, it is not possible to engage in meaningful field research on the kinds of problems that concern us without confronting the need to develop programs and train personnel. Neither research nor training nor program development can be satisfactorily accomplished with one of these very much apart from the other.

There are two truths: life and mortality. Intervening is our process for learning (or changing) which, from the beginning to the end, is man's effort to fathom his being. This struggle to understand has its reward. It causes one to confront the relevancies of life's essential concepts: love for your brother and faith in his ultimate good.

All that remains of the process are the tactics of our design for survival and advancement. Anthropologists sometimes term these tactics "mores". In this enterprising, highly literate, and relatively impersonal western society, we plan mores of educational programs for transmitting and strengthening our accumulated cultural heritage. As a teacher, my concern has been with various pedagogical choices at my disposal. These choices involve such broad longitudinal problems as the depth and extent of my own professional preparation and such specific issues as they relate to what I teach and how I teach.

Each man gropes toward a personal analysis of his conceptual ascendency. Teachers go about this business for much the same reasons most people do. They confront the same truths and essential concepts as others. They merely express themselves differently. For most teachers, process is in the method selected and the material presented. For the scientist, process is in reason and replication. For the poet, process is in his passion for the sound of the word. For any of the aforementioned, and others, who are humanists, process must be in the extent and depth of one's involvement with other human beings. I believe the latter process has the power to flood out the effects of other processes. The humanist tradition of love and faith in our eventual capacity to create good transcends the main effects of such precious modern essentials as science and technology, education and training, legislation, material resources, and comprehensive planning.

Obviously – I hope it is obvious – I do not advocate a return to alchemy or witchcraft, a moratorium on universal education, a declaration of support of programs for human welfare or a halt to cooperative development. I am recommending a reordering of our primary considerations for obtaining those ideals rational men have espoused since the beginning of civilization. This reordering has led me to conclusions that may appear, to some, astonishing and, to others, bizarre. For example, my logic contends that we have placed far too much value and trust in the unshakable necessity for professional preparation and standards for such activities involving health and welfare, child care, and education – including physical education and recreation.

Through the years, I have periodically observed denouncements of the state of professional respectability and pride. Most of us have heard (I have been overheard!) the furious rebuttals of teachers when asked to expend effort as clerks, lunch attendants, crossing guards, recreation aids, janitors, or toilet adjutants. It is little different in other professions, for example, medicine. Doctors who are responsible for the health of residents in state institutions for the mentally retarded are loath to serve as educators, social workers, or child care attendants. And so, it appears, that in the professions concerned with human welfare, society has exacted an unbearable price for the status and rewards it provides this priviledged class. With the right hand, it doles out public honors and the vestments and finery of the pampered educated man. However, with the left hand, it deals us a cruel, never expected, but inevitable blow. It rubs our pride and skills in the affairs and duties of the great unenlightened, under-educated, ordinary man, the nonprofessional – worse still – the semiskilled nonprofessional.

What questions must we ask to, first, begin to understand the wisdom of our professional involvements and, secondly, begin to cope with a process for learning on a level which contributes to *our* learning? I'll start with the following:

1. What are the essentials for acquiring new skills, changing attitudes, or deepening understandings?
2. If Education were at an ideational crossroad, which it may well be, should the teacher learn to accept, and use competently, the tools of the clerk and the custodian or should the clerk learn the trade of the teacher? Or, should things remain, more or less, as they are, with disgruntled and frustrated teachers who are professionally exclusive but not exclusively professional?
3. How efficiently are the material and human resources of our public treasure contributing to the creation and support of viable and meaningful learning settings?

One may ask *how* people acquire new skills or change attitudes. However, the ponderability of *how* lies in our introspective meanderings for we can't "see" learning, as this occurs in our heads. Therefore, with whatever science there is at our command, this question is imponderable. Suppose we ask *why* people acquire new skills or change attitudes. This, too, provides a degree of scientific uncertainty that may not be acceptable to those who adhere to the experimental tradition; e.g. the interrelationship of covert needs and overt motives is little more understood today – although far more widely accepted as a fruitful dimension for hypothetical testing and theory building – than at that time prior to Freud's birth. Then, suppose we ask, "What are some of the consistently observable conditions present some time during the process of learning?" Although a formidable question, this can be discussed profitably. Moreover, this kind of question breaks from the trivial, unproductive, tautological investigations social scientists are wont to pursue. For example, a purusal of the literature on the use of sub-professionals or quasi-professionals in education, health services or welfare will reveal the adherence to such issues as: Should we employ sub-professionals?; How can these individuals achieve upward mobility during their careers? What types of training programs are needed for these neophyte social welfare assistants?

In several obvious, certainly pragmatic, ways, the above are not completely unimportant questions. Notwithstanding, they are the "wrong" questions if we are interested in developing the fullest utilization of our human resources. For, if we are, we should investigate the nature and conditions of learning. When we study the effects of employing trainees to, eventually, serve as classroom or recreation assistants, we must confront the question, "Under what conditions – if any – can these people learn to behave as effective assistants?" The response to that question will confirm or deny whatever evidence we have concerning whether we should employ these individuals, whether they should be promoted at some stage of their training and experience, and what training programs are most suitable for them.

Under what conditions do people – children, their teachers, their teachers' teachers – learn? People learn or change (these are, to me, synonomous terms) when they: (1) need to change, (2) aspire to change, and (3) are optimistic about the possibility that they will change. Further, *all* individuals should be assumed capable of learning and those who are not learning should be viewed in terms of both their own needs and aspirations as well as the program setting they are involved in. Stated another way, I believe it is far more necessary to seek better ways to convince people of their need to learn and the probability that they will learn than to seek better curricula and methods to promote their learning. I believe that, in the ultimate analysis, we will find that our professional preparation or our curricula or our methods cannot be viewed distinct from those individuals we seek to serve. Further, although the process of learning involves the aforementioned, the core of any such process is the degree to which we are convinced that the individual can learn and he is convinced that he both can and should learn. Fundamentally, whatever its superficial characteristics and manifestations are, *interaction* and *faith* are the inherent qualities of this process.

The burgeoning training programs operating with support from our various anti-poverty agencies are mixed blessings. They give the impression of fair tests of the hypothesis that heretofore unacceptable people can be prepared during very short training periods to assume responsibilities typically held by professional or otherwise very skilled individuals. These programs run the gamut from the training of nurse's aides and medical technicians to social work assistants and teaching personnel in the headstart preschools. Quite surprisingly, and quite contrary to principles of scientific methodology, reports I have received demonstrate the effectiveness of such programs beyond the realm of chance; surprisingly, because the hypothesis is being tested with those least likely to provide it a fair test. In fact, utilizing such populations offers less a test of the hypothesis that the unskilled can learn to perform on skilled or quasi-professional levels than it is a test of the hypothesis that the uneducable can be educated. The first hypothesis assumes the existence of a basic strength of purpose and ability that needs support and nurturement to obtain one's potential. The second hypothesis assumes that strength of purpose and ability can be educated in adults who never previously demonstrated such qualities. That is, intellectual and social skills are plastic; they can be incremented by practice and training. A truly fair test of the hypothesis that the untrained nonprofessional can be trained to assume X amount and kind of responsibility, now reserved for professional workers, will require enlisting subjects who are currently functioning as competent and responsible – albeit nonprofessional – human beings. Quite the opposite kinds of people have been selected for such studies. The overwhelmingly major thrust of these projects has been to employ the unemployable – many who have never been employable and others now with chronic disabilities. Hence, my surprise at the success of such programs and my enthusiasm and wonderment concerning the possibilities of utilizing the untrained in much more demanding situations if they are not screened into programs because they are: aged, illiterate, physically handicapped, alcoholic, mentally retarded, or impoverished. I applaud the rehabilitation of all of the above and wish that those programs not only continue but expand. However, additional projects are necessary if we are to explore the parameters of human competency. That is, if we take seriously the need to develop new kinds of professional and semi-professional workers in the fields of human welfare we must attract and compete for individuals who, in global terms, perform adequately but do not have the formal higher education currently necessary for these assignments. I believe that these kinds of individuals can be trained to serve as first rate teaching assistants (who teach children), social work aides (who evaluate and help families), nurse's aides (who provide good care to patients) and, obviously, excellent clerks, matrons, mimeographers, profectionists, and child care attendants. If we had sufficient numbers of these individuals, teachers and doctors and social workers may be permitted the freedom to practice their highly developed professional skills and to supervise and continue the in-service preparation of their less intensively educated colleagues. It is even possible that we shall discover that some of these trainees can be selected, eventually, for regular teaching or nursing or social work positions – in certain settings and under certain conditions of supervision and continuing inservice education.

Given adequate support for the above kinds of programs, it is entirely possible that we will eventually solve the crushing and demoralizing problem all health and education agencies now face: the incredible shortage of teachers, doctors, social workers, nurses, and various specialized therapists. Certainly, a review of data concerning graduates in the above disciplines reveals that it is hopeless – in fact, a denial of external reality – to expect sufficient increases of these personnel to change this bleak situation during our lifetimes. In fact, the reverse is true. As our population increases alarmingly, and as new services and programs are sponsored, competition for professionally prepared workers becomes keener and, consequently, shortages will exacerbate. In the coming generations, the expected roadblock to improved and expanded health and education services will not be induced by material insufficiency but by the sheer unavailability of human resources.

The above leads inevitably to an accounting of our efficiency in conserving and placing in best use our common treasure of trained personnel. I believe that our record has been incredibly poor. Further, only through the grace of our extraordinary natural and hard-won affluence have we been able to survive complete and catastrophic breakdowns of our systems of free public education and other health and welfare activities. It is probable that no other nation could operate so inefficiently and thoughtlessly in these areas and continue to provide the quality and continuum of programs that are available in this country. However, what results here is not only wasteful and inefficient but unequal and discriminatory. We have the greatest universities and the diploma mills, and most inspiring public school systems and those that are scandalous, the world's most powerful scientific mobilization toward the prevention and treatment of mental retardation and mental illness and, for certain of these groups, the absolutely poorest care found anywhere on the face of the earth. One factor contributing to this awful variability is our squanderous use of professional talent and, ironically, our blind faith in this talent. All too many times, I have heard that certain untrained teachers or untrained social workers actually perform such jobs equally well as trained personnel. This is probably true, not because training is unimportant but more likely because the training does not prepare one for the multitude of tasks that the professional is required to attend to, tasks that have little, if anything, to do with either his training or the historic tradition of this profession. Certainly, many reasonably intelligent laymen can compete equally with social workers in most social work settings. Social workers often have more responsibilities that require anything but social work skills than those that demand such talents. Why, then, should it be shocking to learn that a congenial business school graduate or home economist is as effective as the graduate of social work school? Some social workers spend a good deal more of their time and energy in budget planning (both for their central offices and for indigent families) and home management than they do in casework and group counseling. Similar examples can be given in the fields of education, medicine, psychology, and nursing.

It is apparent that we should no longer tolerate this abuse of what consumed years of effort and thousands of dollars to produce a highly trained professional. Our current practices are self-defeating for they, in effect, guarantee both the continuation of our shortages and the training of first rate people for incompetence; i.e. we are not permitting our professional groups to practice the skills they were taught and we are requiring them to perform in areas where they have no formal preparation and only chance competence. We should urge our policy makers to much more conscientiously insure: that our doctor's practice medicine, not business administration as heads of institutions; that our best teachers are not forced, for economic reasons, to become journeymen administrators; that our nurses once again minister to patients; and that our social workers become social workers. For this to really work, we will need a cadre of assistants to perform many tasks now believed to be the inviolate provinces of card-carrying professionals. We will need lateral as well as upward mobility options for vocational growth and advancement. We will, at the same time, have to take more seriously – and less seriously – the importance of professional preparations: more seriously, in that we must use to much better advantage the specialized talents of the highly trained professional; less seriously, in that we must concede that not all roads to the helping vocations lead from the University.

Essentially, I have postulated that, for most people, interaction skills and a faith in humanity can be trained. For some, these skills appear to be inherent for they are present with or without training. For others, it seems almost impossible to train for these functions. It is the responsibility of those who prepare and employ workers for the fields of human welfare to seek out and place those who have these skills, to encourage those who can attain them, and to counsel into other endeavors those who cannot. Until such time when we will employ, without prejudice, capable workers whose competencies were not formally developed and, until such time, when we will refuse to sustain the activities of those who have proceeded through formal training but remain incompetent, we will continue to neglect huge reservoirs of human talent and dedication that might have been channeled to our causes and, unfortunately, we will continue to support those whose only claim for such consideration is our refusal to admit our earlier errors in selecting and attempting to prepare those individuals.

Training is the method society employs to change an individual who did not or could not change through his own resources. It is not that I depreciate formal training which prompts this thesis. On the contrary, I prize both the value and power of a formal approach to engender change in people. I am upset not by our enthusiasm for standards but by our certainty that there are only these well defined tracks that must be negotiated to obtain required standards. I am upset that we have distorted the objective of our training program by designating it as the evaluation of that program and, thus, in the process, we have precluded any possibility that one can obtain the objective through means other than *that* program.

In a way, I have been saying that, at least for us in the fields of human welfare, formal preparation must not be a goal, but a method to inculcate certain desired skills and insights. The goal relates to what we do,not to what paths we have traveled to permit us to do what we do. When this distinction is better understood we will have made progress in our recruitment of manpower and utilization of all human resources.

All human beings have the capacity to learn. The process of learning depends for its success on the interaction of the learner and the teacher and the faith each has in the strength of that enterprise. We are dealing, then, with human qualities and traits that oftentimes defy the effects of formal training and, certainly, when all things are equal, contribute mightily to what has been learned and how significant that learning is. I cannot comprehend that any factors involving professional preparation, curricula, methods, or facilities are more central than interaction (or love) and faith to the concept of learning and how learning proceeds.

Final Comments

There doesn't appear to be a right way or a wrong way to interact with another human being, to conduct research, or to design demonstration programs, other than to know that the wrong way always involves thoughtlessness, a mechanistic approach – or ennui – that is determined irrespective of human beings involved, what they want, or what they are.

To some colleagues in education and the other helping professions, a dedication to work with handicapped children is impossible. To others, it is unthinkable. Whatever their flaws, frailties, and professional naivete we must entrust our energies and resources with the remaining minority – and not dissipate these in courting the reluctant, however talented and potentially useful they may be to the cause. The door always must be open, but people must choose to enter and not be chosen, they must be encouraged but not forced or seduced, we must offer them a philosophy and not our federal gold or promises we may never keep. For better or worse, we have only each other. Our mission must not be to convert the disaffected professionals. We have much more important and fruitful responsibilities with the handicapped and their families. People will be drawn to our mission – both professionals and others. However, they must convert, not be converted or compelled. Work with the handicapped must become their mission too, not our mission and their livelihood. To gain their faith, our faith must be with the faithful. It is our strongest hope for a future where, as time passes, times change.

RECOMMENDATIONS

While a major focus of the conference was upon similarities among the disabled, recognition and thought were given to differences which affect approaches in research and demonstration. Each of the following recommendations should be analyzed in terms of its application and potential for each disability area. Likewise, unique and specific problems related to each of the disabilities provide challenging research and demonstration possibilities. Unless otherwise indicated, all recommendations imply research and/or demonstration in physical education and/or recreation for handicapped children.

ASSESSMENT AND EVALUATION

For a number of years physical educators, recreation specialists, psychologists, and other behavioral scientists have been attempting to assess and evaluate the effects of various programs and activities upon the physical, intellectual, social and emotional condition of handicapped children. Research and empirical evidence and subjective reports reflect the positive effects of active participation in physical education and recreation programs and activities upon the growth and development of the handicapped. However, more objective and conclusive evidence is needed before definitive statements can be made about the contributions of these programs and activities to the handicapped.

More valid and reliable instruments are needed to determine what changes in fact do take place; to ascertain cause and effect relationships between participation and changes; and to establish why these changes take place. Efforts must be continued and intensified to develop new tools and instruments, and to refine existing ones so that they will be more sensitive to the changes in behavior which are being evaluated.

Contributions, Values and Effects of Participation

1. Determine how active participation in comprehensive physical education and/or recreation programs and activities within these programs affect the individual physically, mentally, socially, emotionally, ethically.

2. Identify unique goals, that is, those not shared with other disciplines, objectives and values of participation by handicapped children in physical education and/or recreation programs and activities (e.g., physical fitness, motor proficiency, motor ability, physical performance).

3. Assess the contributions of physical education and recreation programs and activities in terms of goals and objectives for handicapped children shared with other disciplines (e.g., social adjustment, intellectual growth, keeping children in school, emotional stability, medical progress, ethical values, civic responsibility, economic efficiency, self-realization, human relationships).

4. Evaluate how participation in physical education and/or recreation programs or activities contribute to the achievement of specific developmental tasks.

5. Investigate how and in what ways participation in physical education and/or recreation programs and activities relates to, contributes to, and facilitates the learning process of children in general and of handicapped children in particular.

6. Assess how physical education and/or recreation contribute to growth, development and changes in behavior of children with different handicapping conditions (e.g., multiply handicapped, visually impaired, hearing impaired, severely and profoundly retarded, physically and orthopedically handicapped, ill and infirmed, disadvantaged, those with special health problems).

7. Determine desirability of using participation in recreation as a reward to bring about desired changes in behavior.

8. Evaluate the contributions of physical education and recreation programs and activities to the treatment, care and rehabilitation of the handicapped.

9. Determine the effects of early identification and placement of handicapped children into programs emphasizing psychomotor development, physical activity, and recreation.

10. Determine the effect of participation in psychomotor activities upon vocational readiness, competency and productivity of the handicapped.

11. Determine the relative effectiveness of specific pieces of physical education and/or recreation equipment upon developing designated characteristics and traits of fitness and motor development in handicapped children.

Design and Rationale

1. Determine the appropriateness and applicability of theories of growth and development of Piaget, Guilford and others to establishing a theoretical framework for program development in physical education and recreation for children in general and for handicapped children in particular.

2. Emphasize longitudinal studies of individuals and/or groups.

3. Locate longitudinal studies in multi-disciplinary centers which usually are funded over long periods of time.

4. Use fewer subjects and more variables.

5. Use the case-study method when it is appropriate to the problem being investigated.

Surveys

1. Identify geographical areas and individuals in need of physical education and/or recreational services.

2. Identify programs for and personnel involved in physical education and/or recreation programs for the handicapped.

3. Determine the status of physical education and/or recreation programs for the handicapped conducted by public schools, residential facilities, day care centers, recreation agencies, camps, private, volunteer, civic, service, and public organizations.

4. Determine undergraduate and graduate professional preparation opportunities available in the areas of concern to students in physical education, recreation, special education, administration, supervision, and other related curricula.

5. Determine the composition of college and university students with activity restrictions.

6. Identify personality, physical, social, emotional, and intellectual characteristics and differences among the handicapped.

7. Determine how *special students* are accepted in institutions where they are found.

8. Determine attitudes of teachers and administrators toward special education including its students, program, activities, and staff.

9. Determine attitudes of parents and lay public toward children with various handicapping conditions.

10. Identify knowledge, skills, competencies, and personal characteristics requisite for success in dealing with handicapped children in physical education and/or recreation programs.

11. Determine existing architectural barriers and ways they can be eliminated from facilities used for physical education and recreation programs.

Instrumentation

1. Develop and validate diagnostic and evaluative tools appropriate to physical education and/or recreation programs and activities in each of the areas of concern: physical, intellectual, social, emotional, ethical.

2. Develop and validate new tools and instruments to use with children having specific handicapping conditions as opposed to the current practice of revising tools and instruments originally designed for other purposes and groups.

3. Develop tools and instruments to assess changes in participant's performance and behavior during and after taking part in these programs and activities.

4. Develop test batteries to determine the potential of children with specific handicapping conditions to participate in physical education and/or recreation programs or activities.

5. Develop instruments which will measure effectively performances of children who function at very low levels, the very young (six years of age and under), and the severely and profoundly afflicted.

6. Develop instruments and procedures which can be utilized by practitioners as well as researchers.

7. Determine whether or not there should or can be instruments and procedures unique to recreation and/or physical education.

8. Assess feasibility of utilizing instruments developed by other disciplines to measure desired outcomes or changes in behavior in terms of goals established for physical education and/or recreation.

9. Compare individuals and groups with different handicapping conditions to motor proficiency and physical fitness norms of those with similar conditions, the same mental age, the same chronological age, the same sex, to ascertain progress and the effects of various programs and methods.

10. Determine most effective ways of classifying handicapped and non-handicapped students for participation in physical education and recreation programs, i.e., are traditional and conventional classification indices the most appropriate ways to group individuals to take part in these activities?

11. Determine the efficacy of using psychomotor tests as diagnostic tools to differentiate among functional abilities of retarded and other handicapped individuals.

Standards

1. Secure and maintain standards for physical education and/or recreation facilities, staff, and programs for various institutions involved in these programs for the handicapped.

2. Determine minimum standards of recreation skills and motor performance for residents of institutions prior to community placement.

3. Develop standards, evaluate instruments, and establish criteria for evaluating programs of a psychomotor nature for handicapped children taking into consideration their special needs, interests, abilities, and limitations.

Methods and Materials

1. Validate instructional materials, audiovisual materials, equipment, supplies, and other products for use by teachers, instructors and by the children themselves.

2. Validate specific activities, methods, approaches and techniques used in various programs.

3. Establish new, creative, and fresh methods to present specific motor, physical, and recreational activities to children with various handicapping conditions.

4. Determine the relationship (differences, similarities) between various rehabilitative and treatment modalities and between various activities in recreation and physical education programs.

5. Determine the effect of video-tape replay in teaching activities and skills to children with different handicapping conditions at various functional levels.

6. Determine the role of behavior modification techniques and operant conditioning as applied to physical education and recreation programs for handicapped children.

7. Determine effectiveness of Doman-Delacato, Kephart, Barsch, Getman, Frostig, etc., approaches as compared to other activity programs and approaches in physical education and recreation programs for handicapped children.

8. Determine differences (similarities) between modalities called by different names, e.g., recreation therapy, recreation and/or physical education for the handicapped,

corrective physical education, corrective therapy, adapted physical education; patterning, kinesthesis, reflex therapy, controlling output, assistive therapy.

9. Determine the effects of motivation upon psychomotor function of handicapped children and ascertain techniques of motivation that are most effectively used with various handicapped groups at different age and functional levels.

10. Determine the effects of patterning techniques, assistive therapy, and other therapeutic and rehabilitative methods on psychomotor function and development of handicapped children.

11. Determine effective methods to promote transfer and/or carryover from physical education and/or recreational activities to other situations, activities, and processes.

Perceptual-Motor Considerations

1. Conduct factor analytic studies of perceptual-motor structures of children with specific handicapping conditions.

2. Assess the visual and/or auditory discrimination ability of children with specific handicapping conditions.

3. Determine the relationship between motor performance and physical ability of perceptually handicapped youngsters, and the effects of physical education and/or recreation programs and activities upon such performance and ability.

4. Determine areas of strength and weakness in motor patterns of children with different handicapping conditions.

5. Determine motor learning and retention of children with various physical, social, mental, and emotional handicapping conditions.

6. Determine the learning structure of handicapped children with perceptual problems.

Physiologically Based Considerations

1. Determine the effects of physiological stress on children with various handicapping conditions.

2. Determine the effect of lateral postural imbalance on eye muscle balance and its relationship to reading ability upon children in general and upon handicapped children in particular.

3. Determine whether or not there are limitations in performance and/or proficiency of handicapped children in unaffected parts of their bodies.

4. Ascertain the optimum amount of physical activity needed by children with different handicapped conditions, those with varying degrees of involvement, and at various times in their lives.

5. Determine the effects of participation in psychomotor, physical education, and recreational activities upon organic efficiency and effectiveness of handicapped children.

Physical and Social Environment

1. Interpret and apply empirical evidence to develop a rationale for using specific facilities (swimming pools, camps, playgrounds, etc.) for instructional purposes.

2. Determine ways and means of eliminating architectural barriers.

3. Analyze attitudes of the disabled and handicapped towards institutions and society.

4. Analyze the attitudes of society and the non-handicapped toward the handicapped as reflected through support of programs, types of programs (integrated and separated) and participation in programs.

5. Determine the impact of the physical environment (equipment, supplies, facilities, natural areas, size and nature of open areas, and closed spaces) upon programs and performances.

6. Determine the impact of different types of leadership and how participants perceive leadership upon programs and performances.

INTERPRETATION

Frank and open discussion of various handicapping and disabling conditions is no longer taboo and only to be mentioned in hushed whispers behind closed doors! As the subject of handicapping and disabling conditions has emerged from the darkness of ignorance, prejudice and active antagonism, increased understanding and appreciation of the personal characteristics, abilities, limitations, and unique needs, problems and potentials of the handicapped make it possible to look to a brighter future.

However, programs to interpret the roles, values, and contributions of active participation in physical education and recreation activities by the handicapped must be brought before all publics—professional, para-professional, parents, and laymen. All elements of the mass media and all means of communication should be used to reach each of these publics to gain their support through greater understanding and appreciation of the problems and potentials of the handicapped.

Data retrieval, storage, and dissemination must be considered as necessary prerequisites for research and/or demonstration efforts. In addition to the service needs in these areas, additional investigation and evidence are needed to determine the most efficient and effective ways to obtain and disseminate information about comprehensive physical education and recreation programs for handicapped children.

Collecting, Storing and Retrieving Information

(There is a need to establish a frame of reference and to obtain sufficient background information before judicious programing in any discipline may be realized. A national data bank for information in physical education and recreation for the handicapped is necessary to help meet these needs.)

1. Mobilize existing resources for collecting, storing, and retrieving data, including professional associations, existing centers and networks in special education and related areas, centers for statistics, and census data. The Bureau of Education for the Handicapped, U.S. Office of Education, is encouraged and urged to stimulate and support such efforts.

2. Collect baseline data including national statistics on resource utility, personnel, facilities, administrative considerations, and other status type information.

3. Describe as needed the magnitude of existing efforts and gaps in services to handicapped children based on geography, finances, community attitudes, and similar conditions to develop programs and to fulfill national planning objectives.

4. Promote projects to meet current informational needs, fill existing gaps, answer questions, and give necessary direction to program efforts and activities.

- Collect, analyze and interpret existing research and empirical evidence.
- Identify different types of consultative services available to teachers, instructors, parents, and others involved in physical education and/or recreation programs for handicapped children.
- Develop techniques to educate the public to accept the handicapped and disabled.

Disseminating Information

1. Utilize more efficiently and effectively existing channels of communication, such as:
    - Journals and periodicals such as *Therapeutic Recreation, Journal of Leisure Research, Challenge, Outlook, Research Quarterly, Journal of Health, Physical Education, Recreation, Rehabilitation Literature, Exceptional Children, Journal of the American Corrective Therapy Association, Physical Therapy, Parks and Recreation,* and those dealing with specific handicapping or disabling conditions.
    - Provide information seminars, workshops, observation opportunities, audiovisual presentations, conference and convention programs.
    - Utilize Educational Resources Information Center for Exceptional Children (ERIC), Instructional Materials Centers in Special Education (IMC's), National Clearinghouse for Mental Health Information, Datrix, proposed new National Data Bank in Physical Education for Handicapped Children.
2. Develop new approaches, such as:
    - Initiate funded international conferences utilizing existing organizations and agencies.
    - Determine effectiveness of consultant teams working with professionals from other countries to establish or improve existing programs.
    - Identify quality programs and personnel with specific competencies for comprehensive consultation efforts. (This could be coordinated with existing regional educational centers sponsored by public and private agencies.)
    - Develop monographs, booklets and pamphlets which are broad in scope and include major areas concerning educating handicapped children.
    - Develop a master plan for collecting and disseminating information from physical education and recreation literature to the different concerned publics.
    - Devise ways to enhance two-way multidisciplinary communication and to interpret the benefits of physical education and recreation for the handicapped to personnel from other fields and specialities.

- Develop a specialized series of publications designed for specific groups interested and involved in physical education and/or recreation programing for the handicapped. (This series could be similar in nature and format to the AAHPER series, *What Research Tells the Coach About* , or the NEA series, *What Research Tells the Teacher About*
- Devise ways to evaluate and disseminate instructional materials within a given state, city, school system, or institution.
- Design new approaches for using consultant services, e.g., traveling teams and mobile units.
- Devise ways to orient program personnel in schools, agencies, and institutions to the need for on-going and continuing communication about all aspects of programing for the handicapped.
- Develop a special research publication (periodical) dealing with physical education and recreational programing for the handicapped.
- Provide information concerning values of participation in physical education and/or recreation programs for the handicapped to the mass media for use in programs and articles designed for the lay public.
- Encourage wider dissemination of information about physical education and recreation in professional journals and periodicals of special education and other related disciplines.
- Establish better relationship and communication between research personnel and practitioners.
- Encourage research which has a practical application to and potential for improving and upgrading existing and new physical education and/or recreation programs for the handicapped.
- Provide opportunities for the practitioner to become more adept at understanding theory and its place in directing programs, activities, and methods.

LEGISLATION

Until enactment of Title V, Public Law 88-164 *(Training of Physical Educators and Recreation Personnel for Mentally Retarded and other Handicapped Children),* no specific Federal legislative authorization existed to support research, demonstration, and training in physical education and recreation for handicapped children. While a few research and demonstration projects had been approved under general provisions of certain Federal programs, there had been little opportunity for organized and concerted efforts in these areas. Consequently, this same low priority had been experienced in attempts to obtain funds for physical education and recreation efforts at state and local levels. Programs and efforts, including those on behalf of the handicapped, are influenced directly and subtly at all levels by existing legislation. Omission or failure to include a curricular area in legislative provisions usually places that area in a position of low priority for funds and other efforts within and outside the respective legislative bodies.

While many resources and much effort have been given to programing for the handicapped, the present emphasis and concern over physical education and recreation are relatively recent happenings. Reports of research findings along with many success stories and promising practices in physical education and recreation programs for handicapped children have been instrumental in giving the impetus to bring about long-needed and sought legislative action. Conversely, recently enated legislation has given new and needed status to physical education and recreation programs for handicapped children. This new support has been an important factor in the development of many new programs in physical education and recreation for handicapped children and has stimulated expansions and enrichment of many existing programs.

Herein legislation refers to any laws that affect the handicapped directly as well as the training of persons working with or rendering services to the handicapped.

General Legislation

1. Examine the historical and contemporary causes or reasons for existing legislation or lack of legislation related to the handicapped.
2. Study the social changes that have taken place or might take place that would justify changes in legislation to improve opportunities for the handicapped.
3. Evaluate effectiveness of existing services and sources of funds for research, demonstration, and service projects in physical education and recreation for the handicapped including Titles I, III, and VI of the Elementary and Secondary Education Act; Title V of Public Law 88-164; Office of Education; Bureau of Education for the Handicapped; National Institutes of Health; Department of the Interior; state resources; private foundations; civic and service groups.
4. Determine appropriate certification standards and requirements for personnel working with handicapped children in physical education and/or recreation programs.
5. Determine liabilities of para-professionals, volunteers, and *middle level* personnel which are imposed because of their work with handicapped children.
6. Study liabilities involved in transporting the handicapped.

RECRUITMENT AND TRAINING

Successful programs in physical education and recreation for handicapped children require the efforts and talents of many different individuals, professionals, para-professionals and volunteers. Specific interests and special competencies of concerned individuals contribute to the need for involving large numbers of people to plan, organize, and implement comprehensive physical education and recreation programs for handicapped children; no avenue can be overlooked when seeking personnel for these programs. In addition to college and university students, personnel from organizations dedicated to service, parent associations, civic clubs, and service groups must be recruited. All existing arms of the mass media and exposures associated with specific class offerings, college nights, career days, and special assemblies in secondary schools and institutions of higher learning must be utilized fully in recruiting personnel for these programs.

Recruitment, broadly interpreted, refers to any action or activity designed to generate interest, to obtain and to hold personnel at all levels. Experimentation, evaluation and a sound theoretical framework are needed to assure maximum success in these efforts.

On-going and continuous training for all staff is a characteristic of successful programs. As such, training refers to all types of programs geared to orientation, pre-service, and in-service education for personnel at all levels; included are formal and informal professional education and specialized training opportunities. Both recruitment and training are continuous processes given detailed attention by a variety of personnel connected with successful physical education and recreation programs for handicapped children.

Recruitment

1. Determine personality characteristics necessary for successfully working with handicapped children in physical education and/or recreation programs.
2. Evaluate methods of recruiting professionals.
    - Develop and evaluate programs involving teenagers who work with handicapped children to encourage these young people to consider recreation, physical education, or special education as career possibilities.
3. Study volunteers.
    - Determine why people volunteer.
    - Assess the characteristics and traits of good volunteers.
    - Ascertain how to hold volunteers in programs for handicapped children.

Pre-Service Training

1. Sub-professional
    - Develop orientation guidelines for volunteers and sub-professionals who work with handicapped children.
    - Identify roles of paid *middle level* manpower such as assistants, aides, and other sub- and non-professional personnel.
2. Para-professional
    - Determine program needs at junior college and community college levels for training physical education and recreation personnel to work with handicapped children.
    - Determine how professionals can more effectively involve para-professionals in these programs.
3. Professional Undergraduate
    - Determine knowledge, skills, and competencies above and beyond those needed by a well-trained and qualified physical educator or recreation specialist to work with the handicapped.

- Determine knowledge, skills, and competencies above and beyond those needed by a well-trained and qualified special educator to conduct physical education and/or recreation activities effectively.
- Determine courses in physical education and recreation required (offered) by universities, colleges, and junior colleges which prepare professional personnel to work with the handicapped in general and with specific handicapping conditions in particular.
- Determine courses in special education, psychology, growth and development, and related areas required (offered) by colleges, universities, and junior colleges which prepare physical education and recreation personnel to work with the handicapped.
- Evaluate existing certification requirements in physical education, recreation, and special education to determine necessary changes and new directions to prepare personnel to meet the needs of handicapped children.

4. Professional Graduate
   - Train research specialists, administrators, and supervisors as well as practitioners with knowledge, skills, and competencies in physical education and recreation for handicapped children.
   - Plan well-defined doctoral programs which place high priority on training candidates for teacher preparation and research specialization in physical education and recreation for the handicapped.
   - Develop research training programs which focus on planning and developing curricula in the areas of concern.
   - Determine the desirability and feasibility of a consortium of universities for doctoral training in physical education, recreation and special education.

In-Service Training

1. Construct and evaluate in-service education programs, methods, and approaches.
2. Develop and evaluate in-service institutes and practical workshops for sensitizing and training special education, physical education and recreation personnel, supervisors, and administrators to needs, potentials and benefits of physical education activities and recreation programs for handicapped children.
3. Assess the effectiveness of inter-school teams consisting of people with a breadth of experience in diverse backgrounds who travel to different institutions, agencies or localities for in-service training purposes.

SERVICES

The values of research and demonstration efforts in physical education and recreation for handicapped children can be determined only in terms of direct or indirect contributions to improve programs and services, refine methods, provide rationale or scientific constructs upon which services are rendered, and provide data about activities and approaches appropriate for individuals with different handicapping conditions. Meaningful research and sound demonstration can provide general direction and specific information to improve services. Within this context, services refer to functions and activities of all types, at all levels, and in all environmental settings which are aimed directly at, or are for handicapped children.

General

1. Determine the feasibility and utility of census identification and registration of all handicapped.
2. Determine modifications of various social systems necessary to increase services—e.g., transportation, facilities, equipment, avocational guidance—to the handicapped.
3. Study differentiation of the needs of and services to rural and urban handicapped children.
4. Develop and evaluate cost-benefit analysis techniques which are applied to physical education and/or recreation operations.
5. Determine methods to plan programs and services on some basis other than cost-benefit analyses.
6. Develop and evaluate approaches to coordinate effectively inter-agency programs, relations, communications, financing, research and demonstration efforts among organizations and agencies interested in and concerned with various aspects of physical education and/or recreation for handicapped in general and/or for given conditions in particular.

Administration Leadership

1. Establish cost bases of physical education and/or recreation programs for handicapped through cost analyses of demonstration programs and on-going programs including separated, integrated, and flexible organizational patterns.
2. Determine the effects of leadership upon development and progress made by the handicapped through participation in physical education and/or recreation programs.
3. Determine the relative merits (and demerits) of community programs for severely and profoundly retarded, multiply handicapped, and severely afflicted compared to institutionalized programs.
4. Determine optimum size of group best suited for conducting various forms of recreation and physical education activities for the handicapped.

Integrating Handicapped and Non-Handicapped

1. Determine types of activities which in themselves provide a base for integrating handicapped and non-handicapped children.
2. Determine what conditions and approaches to activities are most conducive to integrating handicapped and non-handicapped children.

3. Determine the relative effectiveness of physical education and/or recreation programs consisting of participants with different handicapping conditions, the same condition, and the handicapped with the non-handicapped.

4. Ascertain the values and limitations of integrative and segregative participation to the handicapped and non-handicapped.

5. Determine how life styles of individuals with various handicaps differ from each other and from the non-handicapped.

6. Develop approaches for integrating institutionalized handicapped into various community programs.

Programing

1. Determine needs for each handicapping condition in terms of chronological ages, program requirements, facilities, activities, methods, transportation, and special adaptations.

2. Determine activities and approaches necessary and appropriate for specific types of programs, e.g., camp, hospital, recreation, public school, private school, residential facility, day care center, community center, playground, home.

3. Determine modifications required in existing programs to serve the multiply-handicapped more effectively.

4. Develop methods for evaluating, grouping, and placing children so as to provide more effective programing.

5. Determine similarities and/or differences among motor patterns, e.g., running, throwing, catching, between those with various handicapping conditions and the non-handicapped.

6. Identify communication skills and approaches effective in teaching or working with handicapped children.

7. Develop and utilize multi-dimensional analysis of underlying skill functions needed as a requisite for gratifying participation in physical education and recreation activities, including–

- Physical fitness
- Motor coordination
- Gross motor ability
- Intelligence level required
- Energy expenditure
- Degree of daring and courage
- Interaction
- Dependency upon verbal instruction for skill mastery, perceptual aspects, i.e., responsiveness to acoustic cues, clarity of vision, etc.
- Complexity along separate dimensions described above; however, an activity also must be taken as a whole and placed on a progression continuum in terms of overall complexity.

8. Determine the effect of diagnostically designed physical education and recreation programs for those with various handicapping conditions.

Education for Leisure

1. Ascertain and evaluate carryover of activities from physical education in the school setting to the community recreational setting, and carryover of childhood recreational skills into adulthood.
2. Ascertain to what extent new skills are retained and incorporated into recreation patterns.
3. Determine *basic* recreation and physical education skills needed by handicapped children.
4. Evaluate relationships between leisure time skills and vocational-social-emotional adjustments of those with different handicapping conditions.
5. Evaluate how handicapped who receive vocational guidance use their leisure time.
6. Determine how to *counsel* individuals to match activities with abilities and handicapping conditions with existing opportunities.
7. Develop techniques and methods to assist individuals locate and use community resources.
8. Devise methods and model programs to assist handicapped children to become *recreationally* independent and *literate.*
9. Examine the recreation experience itself in terms of variables which influence activities and how they exert this influence, how these variables can be manipulated to alter the recreation experience to bring about behavioral changes, and benefits and/or detrimental effects of specific recreation activities.
10. Determine how the handicapped use their leisure time and provide programs to prepare them for active participation to a wide variety of recreational activities.

Services to Parents

1. Investigate why parents respond as they do to the handicaps of their children.
2. Establish guidelines and workshop models to assist parents in planning and providing physical activities and recreational opportunities for their handicapped children.

Camping and Outdoor Education

1. Determine if camping experiences can be more effective than non-camping experiences for physical, social, emotional, intellectual, and growth and development of handicapped children.
2. Determine methods of increasing carryover values from outdoor education programs to the home, school, and recreation programs.

PARTICIPANTS

Group I

Discussion Topics: Public and Private Schools; Special Education and Related Area; Physical Handicaps; and Services.

Dr. Charles E. Buell
Teacher, Visually Handicapped
Long Beach, California 90808

Dr. Dorothy B. Carr
Assistant Director of Special Education
Los Angeles City School
450 N. Grand Avenue
Los Angeles, California 90012

Dr. William H. Freeberg
Associate Professor of Recreation and Outdoor Education
Southern Illinois University
Carbondale, Illinois 62903

Miss Irene Gromek, Consultant for the Physically Handicapped
Macomb County Intermediate School District
44001 Garfield Road
Mt. Clemens, Michigan 48043

Mr. Alton Hodges, Assistant Professor
Department of Physical Education
The University of Texas at Austin
2608 Albata Avenue
Austin, Texas 78757

Mr. Lee A. Iverson, Chief
Division of Children's Schools
Illinois Department of Children and Family Services
404 State Office Building
Springfield, Illinois 62706

Dr. T.J. Nugent, Professor and Director
Division of Rehabilitation-Education Services
University of Illinois
Champaign, Illinois 61820

Dr. Karl G. Stoedefalke, Associate Professor
Department of Physical Education - Men
University of Wisconsin at Madison
2000 Observatory Drive, Room 1149
Madison, Wisconsin 53706

Dr. George T. Wilson, Assistant Director
Milwaukee Public Schools
Division of Recreation and Adult Education
5225 West Vliet Street
Milwaukee, Wisconsin 53208

Group II

Discussion Topics: Institutions; Recreation; Emotionally Disturbed and Hearing Impaired; and Research.

Dr. Lois L. Elliott, Associate Professor
Central Institute for the Deaf
818 South Euclid
St. Louis, Missouri 63110

Mr. Fred Humphrey, Coordinator
Therapeutic Recreation
Recreation and Parks
The Pennsylvania State University
261 Recreation Building
University Park, Pennsylvania 16802

Mr. Eugene B. Lusk, Coordinator and Advisor, Recreation
Nevins Vocational Training School
3523 Nevins Road
Charlotte, North Carolina 28213

Dr. John A. Nesbitt, Coordinator
Therapeutic Recreation Services
San Jose State College
San Jose, California 95114

Dr. Gerald O'Morrow, Associate Professor of Recreation
Indiana State University
Terre Haute, Indiana 47809

Dr. Hally B.W. Poindexter, Professor
Department of Physical Education
Rice University
Houston, Texas 77001

Dr. Lawrence Rarick, Professor
Department of Physical Education
University of California
Berkeley, California 94720

Dr. Peter Valletutti, Director of Special Education
Coppin State College
2500 W. North Avenue
Baltimore, Maryland 21216

Dr. Betty van der Smissen, Professor of Recreation
The Pennsylvania State University
260 Recreation Building
University Park, Pennsylvania 16802

Dr. Lester Mann, Director of Special Education
County Superintendent of Schools
Norristown and Montgomery County
443 South Gulph Road
King of Prussia, Pennsylvania 19406

Dr. Peter R. Wisher, Chairman
Department of Physical Education and Athletics
Gallaudet College
Washington, D.C. 20002

Group III

Discussion Topics: Other Agencies (other than Schools and Institutions); Physical Education; Mental Retardation; and Training.

Miss Doris Berryman, Research Scientist
School of Education
New York University
South 61, Washington Square
New York, New York 10003

Dr. Louis Bowers, Assistant Professor
Department of Physical Education
University of South Florida
Tampa, Florida 33620

Dr. Marguerite Clifton
Professor and Head
Department of Physical Education for Women
Purdue University
Lafayette, Indiana 47901

Mr. Robert M. Decker, Director of Recreation and Physical Education
Utah State Training School
American Fork, Utah 84003

Mr. Anthony G. Linford
Motor Performance and Play Research Laboratory
Institute for Research On Exceptional Children
University of Illinois
Champaign, Illinois 61820

Dr. Floyd E. McDowell, Director
Metropolitan New York Regional Training Center
State Department of Mental Hygiene
Suite 1716, 15 Park Row
New York, New York 10038

Dr. H.D. Sessoms, Chairman
Recreation Curriculum
University of North Carolina
Box 855
Chapel Hill, North Carolina 27514

Dr. Morton Thompson, Chairman
Department of Recreation
State University
Farmingdale, New York 11735

Dr. William J. Tisdall, Chairman
Department of Special Education
University of Kentucky
Lexington, Kentucky 40506

Dr. Janet A. Wessell, Professor
Department of Health, Physical Education and Recreation
Michigan State University
Women's Intramural Building
East Lansing, Michigan 48823

GUEST OBSERVERS

Mrs. Emilie Baebel
Youth Committee
President's Committee on Employment of the Handicapped
Room 7139, Main Labor Building
Washington, D.C. 20210

Mr. William F. Baxter, Staff Assistant
Secretary's Committee on Mental Retardation
U.S. Department of HEW
Washington, D.C. 20201

Mr. James Chan, Physical Therapy Consultant
Baltimore City Health Department
Baltimore, Maryland 21202

Dr. Florence Christoplos, Director
Special Education Program
Kennedy Institute-John Hopkins University
Baltimore, Maryland 21203

Dr. John W. Churchill
Department of Recreation
University of Maryland 20740

Mrs. Margaret F. Clark, Consultant
Short-Term Training, Division of Training
Social and Rehabilitation Services
U.S. Department of HEW
Washington, D.C. 20201

Mr. Francis A. Cosgrove, Assistant Director of Recreation
Town of Hempstead, Department of Parks and Recreation
350 Front Street
Hempstead, New York 11550

Mr. John H. Eiler, Chairman
Recreation Committee
National Association for Retarded Children
33 Chase Street
Hyannisport, Massachusetts 02601

Dr. Marvin Eyler, Chairman
Department of Physical Education
University of Maryland
College Park, Maryland 20740

Mr. Michael E. Flanagan, Coordinator
Health, Physical, and Conservation Education
Pennsylvania Department of Public Instruction, Box 911
Harrisburg, Pennsylvania 17126

Mrs. Sonya Fleming, Supervisor
Child Development
Growth and Development Center
1800 North Edison Street
Arlington, Virginia 22207

Mrs. Dorothy Hamburg, Associate Professor
Department of Physical Education
Gallaudet College
Washington, D.C. 20002

Dr. Ellen Harvey, Chairman
Department of Recreation
University of Maryland
College Park, Maryland 20740

Dr. Frank J. Hayden, Director
Physical Education and Recreation
The Joseph P. Kennedy Fr. Foundation
719 Thirteenth Street, N.W.
Washington, D.C. 20005

Miss Marilyn Hennessy, Director
Care and Treatment
National Easter Seal Society for
Crippled Children and Adults, Inc.
2023 West Ogden Avenue
Chicago, Illinois 60612

Mrs. Nancy Hicks, Therapist
Children's Research Clinical Center
National Institutes of Health
9000 Rockville Pike
Bethesda, Maryland 20014

Mr. Wilmer L. Johnson, Instructor
Department of Physical Education - Men
Howard University
Washington, D.C. 20001

Dr. Ellen Davis Kelly, Professor
Health and Physical Education
Illinois State University
Normal, Illinois 61761

Dr. Dan Leviton, Associate Professor
Health Education
University of Maryland
College Park, Maryland 20740

Dr. Arthur G. Miller, Consultant
Task Force on Service Programs for
Young Adults of the United
Cerebral Palsy Associations
School of Education
Boston University
Boston, Massachusetts 02215

Miss Helen Jo Mitchell, Director-
Coordinator
Mentally Retarded Programs
D.C. Department of Recreation
1884 Columbia Road, N.W.
Washington, D.C. 20009

Mrs. Honey W. Nashman, Associate Professor
Department of Physical Education-Women
The George Washington University
Washington, D.C. 20006

Miss Patricia Nicholson, Student
Department of Special Education
University of Maryland
College Park, Maryland 20740

Mrs. Lee Anna Robbins, Director
Day Camp Programs
Montgomery County Association for
Retarded Children
11212 Norris Drive
Silver Spring, Maryland 20902

Dr. Sue Shuster
9136 Springhill Lane
Greenbelt, Maryland 20770

Miss Sharon H. Smith, Director
Arlington Adult Activity Center
3507 Columbia Pike
Arlington, Virginia 22204

Mr. Arnold Sperling, Chief
Patient Activities Director
Clinical Center-National Institutes of
Health
9000 Rockville Pike
Bethesda, Maryland 20014

Mr. Elliott G. Young, Director
Recreation and Camping Services
New York Association for the Blind
111 East 59th Street
New York, New York 10022

Mrs. Loretta Young
Teacher
Developmental Center for Special
Education
1619 M Street, N.W.
Washington, D.C. 20036

Dr. John D. Webster, Assistant Director
Mental Health Training and Research
Southern Regional Education Board
130 6th Street, N.W.
Atlanta, Georgia 30313

INVITED SPEAKERS

Dr. Burton Blatt, Professor and Chairman
Special Education Department
University of Syracuse
Boston, Massachusetts 02215

Dr. Lester M. Fraley, Dean
College of Health, Physical Education, and Recreation
University of Maryland
College Park, Maryland 20740

Dr. Carl A. Troester, Jr., Executive Secretary
American Association for Health, Physical Education, and Recreation
1201 Sixteenth Street, N.W.
Washington, D.C. 20036